

System Requirements and Performance (Dollars are in millions except as noted.)								
California North/South	90	110	125F	125E	150F	150E	New HSR	Maglev
<i>Physical, production, and traffic factors (traffic data is for the year 2020)</i>								
Route-miles	597	594	546	546	546	546	545	527
Trip-time, hours, Los Angeles-San Francisco	8.1	6.4	5.7	5.3	5.1	4.8	3.2	2.1
Average train speed (mph)	65	80	81	86	89	95	136	218
Average fare per passenger-mile (dollars)	0.166	0.157	0.169	0.166	0.164	0.161	0.162	0.194
Trains per day in each direction	29	31	39	44	44	53	92	91
Passengers, Millions of Trips (2020)	6.3	7.9	9.6	10.3	10.7	11.6	15.6	18.6
Passenger-Miles, Millions (2020)	1,160	1,716	1,881	2,116	2,252	2,581	4,742	5,888
Average trip length (miles)	184	218	195	205	211	223	303	316
Average trip length as % of route length	31%	37%	36%	38%	39%	41%	56%	60%
HSGT traffic density per route-mile (millions of passenger-miles per route-mile)	1.9	2.9	3.4	3.9	4.1	4.7	8.7	11.2
Percent of air traffic diverted	2.1%	4.6%	4.6%	5.8%	6.7%	8.6%	27.4%	36.9%
Percent of intercity auto traffic diverted	2.8%	4.1%	3.6%	3.9%	4.0%	4.4%	6.3%	6.7%
Percent of HSGT traffic by source:								
Diverted from air	16%	23%	17%	19%	21%	24%	51%	56%
Diverted from auto	24%	27%	36%	36%	35%	35%	19%	17%
Diverted from conventional rail	43%	35%	31%	29%	28%	26%	17%	15%
Diverted from bus	9%	8%	8%	7%	7%	7%	4%	3%
Induced	8%	8%	8%	8%	8%	8%	9%	9%
<i>Operating efficiency factors, 2020</i>								
Train-miles. millions	12.7	13.5	15.2	17.0	17.3	20.1	33.1	32.4
Passenger-miles per train mile	92	127	124	125	130	128	143	182
Seat-miles, millions	3,343	3,559	4,007	4,480	4,568	5,317	9,387	10,520
Load factor	35%	48%	47%	47%	49%	49%	51%	56%
Gross ton-miles, millions	4,584	4,664	4,947	5,362	5,468	6,163	12,957	5,826
Passenger-miles per gross ton-mile	0.25	0.37	0.38	0.39	0.41	0.42	0.37	1.01
Train-hours, millions	0.20	0.17	0.19	0.20	0.20	0.21	0.24	0.15
Passenger-miles per train hour	5,947	10,207	10,070	10,749	11,543	12,155	19,514	39,571
Operating ratio	79%	62%	61%	64%	57%	59%	51%	34%
<i>Operating results for 2020</i>								
Revenues:								
Passenger transportation revenue	\$192	\$269	\$317	\$351	\$370	\$416	\$770	\$1,143
Income from ancillary activities	\$8	\$11	\$16	\$16	\$17	\$18	\$21	\$24
System revenues	\$200	\$280	\$333	\$367	\$387	\$434	\$791	\$1,167
<i>Percent of system revenues from ancillary activities</i>	4%	4%	5%	4%	4%	4%	3%	2%
Operating and maintenance expenses:								
Maintenance of way	\$7	\$8	\$12	\$24	\$9	\$18	\$41	\$34
Maintenance of equipment	\$22	\$22	\$25	\$24	\$29	\$29	\$65	\$38
Transportation	\$43	\$43	\$49	\$59	\$53	\$67	\$98	\$118
Passenger traffic and services	\$42	\$48	\$57	\$61	\$62	\$68	\$94	\$109
General and administrative	\$37	\$46	\$51	\$55	\$58	\$64	\$96	\$90
Total O&M expense	\$151	\$168	\$194	\$223	\$211	\$246	\$394	\$389
<i>Per passenger-mile (dollars):</i>								
Maintenance of way	\$0.006	\$0.005	\$0.006	\$0.011	\$0.004	\$0.007	\$0.009	\$0.006
Maintenance of equipment	\$0.019	\$0.013	\$0.014	\$0.012	\$0.013	\$0.011	\$0.014	\$0.006
Transportation	\$0.037	\$0.025	\$0.026	\$0.028	\$0.024	\$0.026	\$0.021	\$0.020
Passenger traffic and services	\$0.036	\$0.028	\$0.030	\$0.029	\$0.028	\$0.026	\$0.020	\$0.018
General and administrative	\$0.032	\$0.027	\$0.027	\$0.026	\$0.026	\$0.025	\$0.020	\$0.015
Total O&M expense	\$0.130	\$0.098	\$0.103	\$0.105	\$0.094	\$0.095	\$0.083	\$0.066
Operating surplus	\$49	\$112	\$139	\$144	\$175	\$188	\$397	\$778
<i>Operating surplus per passenger-mile (dollars)</i>	\$0.042	\$0.065	\$0.074	\$0.068	\$0.078	\$0.073	\$0.084	\$0.132
Year showing first operating surplus	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000

California North/South	90	110	125F	125E	150F	150E	New HSR	Maglev
Life-Cycle Measures (All amounts are present values, as of the year 2000, of cash inflows/outflows between 2000 and 2040.)								
Revenues:								
Passenger Transportation Revenues	\$1,520	\$2,122	\$2,506	\$2,773	\$2,918	\$3,286	\$6,045	\$8,975
Income from Ancillary Activities	\$61	\$89	\$121	\$128	\$134	\$143	\$163	\$187
System Revenues	\$1,582	\$2,210	\$2,627	\$2,902	\$3,051	\$3,429	\$6,208	\$9,162
Less: Total O&M expenses	\$1,222	\$1,365	\$1,611	\$1,854	\$1,724	\$2,034	\$3,318	\$3,348
Operating surplus	\$360	\$846	\$1,017	\$1,048	\$1,327	\$1,394	\$2,890	\$5,814
Less: Continuing investments	\$84	\$132	\$146	\$184	\$176	\$162	\$401	\$230
Surplus after continuing investments	\$276	\$714	\$870	\$864	\$1,151	\$1,232	\$2,489	\$5,584
Initial investment:								
Initial vehicle investment	\$372	\$339	\$466	\$410	\$438	\$494	\$1,043	\$995
Initial infrastructure investment	\$931	\$2,561	\$7,445	\$8,517	\$7,564	\$8,684	\$14,724	\$22,406
Initial investment for ancillary activities	\$11	\$14	\$20	\$22	\$22	\$24	\$25	\$28
Initial investment, Total	\$1,314	\$2,914	\$7,931	\$8,948	\$8,024	\$9,203	\$15,792	\$23,430
Percent of total initial investment pertaining to--								
Vehicles	28%	12%	6%	5%	5%	5%	7%	4%
Infrastructure	71%	88%	94%	95%	94%	94%	93%	96%
Ancillary activities	1%	0%	0%	0%	0%	0%	0%	0%
Total initial investment per route-mile	\$2.2	\$4.9	\$14.5	\$16.4	\$14.7	\$16.9	\$29.0	\$44.5
Portion of initial investment that is <u>not</u> covered by surplus after continuing investments	\$1,038	\$2,200	\$7,060	\$8,084	\$6,873	\$7,971	\$13,303	\$17,846
Percentage of initial investment covered by surplus after continuing investments	21%	24%	11%	10%	14%	13%	16%	24%
Comparison of Benefits and Costs; Assessment of Partnership Potential								
Surplus after continuing investments	\$276	\$714	\$870	\$864	\$1,151	\$1,232	\$2,489	\$5,584
Total benefits:								
Benefits to HSGT users:								
System revenues	\$1,582	\$2,210	\$2,627	\$2,902	\$3,051	\$3,429	\$6,208	\$9,162
Users' consumer surplus	\$2,153	\$3,055	\$3,374	\$3,745	\$3,913	\$4,396	\$7,688	\$10,324
Total benefits to HSGT users	\$3,735	\$5,265	\$6,001	\$6,647	\$6,964	\$7,824	\$13,896	\$19,486
Benefits to the public at large:								
Airport congestion delay savings								
Operation delays	\$514	\$782	\$722	\$828	\$895	\$1,048	\$2,272	\$2,747
Passenger delays	\$963	\$1,478	\$1,358	\$1,563	\$1,693	\$1,988	\$4,343	\$5,239
Total airport congestion delay savings	\$1,477	\$2,261	\$2,080	\$2,390	\$2,588	\$3,036	\$6,614	\$7,986
Highway delay savings	\$738	\$1,080	\$1,608	\$1,773	\$1,807	\$1,985	\$2,015	\$2,222
Emission savings	(\$102)	\$51	\$92	\$366	(\$51)	\$444	\$656	\$736
Total benefits to the public at large	\$2,113	\$3,392	\$3,780	\$4,530	\$4,343	\$5,464	\$9,285	\$10,943
Total benefits	\$5,848	\$8,657	\$9,781	\$11,176	\$11,307	\$13,288	\$23,181	\$30,429
Total costs:								
Initial investment	\$1,314	\$2,914	\$7,931	\$8,948	\$8,024	\$9,203	\$15,792	\$23,430
O&M expense	\$1,222	\$1,365	\$1,611	\$1,854	\$1,724	\$2,034	\$3,318	\$3,348
Continuing investments	\$84	\$132	\$146	\$184	\$176	\$162	\$401	\$230
Total costs	\$2,619	\$4,410	\$9,688	\$10,985	\$9,925	\$11,400	\$19,511	\$27,007
Incidence of total costs:								
Costs borne by users	\$1,582	\$2,210	\$2,627	\$2,902	\$3,051	\$3,429	\$6,208	\$9,162
Publicly-borne costs	\$1,038	\$2,200	\$7,060	\$8,084	\$6,873	\$7,971	\$13,303	\$17,846

California North/South	90	110	125F	125E	150F	150E	New HSR	Maglev
Total benefits less total costs	\$3,228	\$4,247	\$93	\$191	\$1,383	\$1,889	\$3,670	\$3,422
Benefits to HSGT users less costs borne by users	\$2,153	\$3,055	\$3,374	\$3,745	\$3,913	\$4,396	\$7,688	\$10,324
Benefits to the public at large less publicly-borne costs	\$1,075	\$1,192	(\$3,280)	(\$3,554)	(\$2,530)	(\$2,507)	(\$4,018)	(\$6,902)
Ratio of total benefits to total costs	2.23	1.96	1.01	1.02	1.14	1.17	1.19	1.13
Ratio of benefits to HSGT users, to costs borne by users	2.36	2.38	2.28	2.29	2.28	2.28	2.24	2.13
Ratio of benefits to the public at large, to publicly-borne costs	2.04	1.54	0.54	0.56	0.63	0.69	0.70	0.61
Does this case meet the threshold tests for "partnership potential"?	YES	YES	YES	YES	YES	YES	YES	YES

System Requirements and Performance (Dollars are in millions except as noted.)						
California South	90	110	125F	125E	New HSR	Maglev
<i>Physical, production, and traffic factors (traffic data is for the year 2020)</i>						
Route-miles	128	128	128	128	142	123
Trip-time, hours, San Diego-Los Angeles	2.0	1.8	1.8	1.8	1.3	0.7
Average train speed (mph)	63	70	71	73	108	167
Average fare per passenger-mile (dollars)	0.276	0.285	0.285	0.285	0.244	0.312
Trains per day in each direction	25	26	26	27	26	55
Passengers, Millions of Trips (2020)	2.9	3.0	3.0	3.1	3.2	3.6
Passenger-Miles, Millions (2020)	276	283	287	289	365	330
Average trip length (miles)	94	94	94	94	113	92
Average trip length as % of route length	73%	73%	73%	73%	80%	74%
HSGT traffic density per route-mile (millions of passenger-miles per route-mile)	2.1	2.2	2.2	2.3	2.6	2.7
Percent of air traffic diverted	17.8%	19.1%	19.5%	19.8%	21.5%	25.3%
Percent of intercity auto traffic diverted	0.5%	0.6%	0.7%	0.7%	1.1%	1.7%
Percent of HSGT traffic by source:						
Diverted from air	10%	11%	11%	11%	11%	12%
Diverted from auto	4%	5%	5%	5%	7%	11%
Diverted from conventional rail	74%	72%	71%	71%	68%	62%
Diverted from bus	6%	6%	6%	6%	6%	8%
Induced	6%	7%	7%	7%	7%	8%
<i>Operating efficiency factors, 2020</i>						
Train-miles, millions	2.3	2.4	2.4	2.5	2.7	4.9
Passenger-miles per train mile	118	116	118	114	136	67
Seat-miles, millions	618	643	643	668	764	741
Load factor	45%	44%	45%	43%	48%	45%
Gross ton-miles, millions	848	843	794	799	1,054	445
Passenger-miles per gross ton-mile	0.33	0.34	0.36	0.36	0.35	0.74
Train-hours, millions	0.04	0.04	0.03	0.03	0.02	0.03
Passenger-miles per train hour	7,390	8,085	8,391	8,371	14,719	11,132
Operating ratio	60%	59%	58%	63%	66%	60%
<i>Operating results for 2020</i>						
Revenues:						
Passenger transportation revenue	\$76	\$81	\$82	\$83	\$89	\$103
Income from ancillary activities	\$3	\$3	\$3	\$3	\$4	\$5
System revenues	\$79	\$84	\$85	\$86	\$93	\$107
<i>Percent of system revenues from ancillary activities</i>	<i>4%</i>	<i>4%</i>	<i>4%</i>	<i>4%</i>	<i>4%</i>	<i>4%</i>
Operating and maintenance expenses:						
Maintenance of way	\$2	\$2	\$2	\$5	\$9	\$9
Maintenance of equipment	\$6	\$6	\$6	\$6	\$8	\$5
Transportation	\$10	\$10	\$10	\$11	\$11	\$15
Passenger traffic and services	\$15	\$16	\$16	\$16	\$15	\$17
General and administrative	\$13	\$13	\$13	\$13	\$15	\$15
Total O&M expense	\$46	\$47	\$47	\$52	\$59	\$61
<i>Per passenger-mile (dollars):</i>						
Maintenance of way	<i>\$0.009</i>	<i>\$0.008</i>	<i>\$0.009</i>	<i>\$0.019</i>	<i>\$0.025</i>	<i>\$0.028</i>
Maintenance of equipment	<i>\$0.022</i>	<i>\$0.022</i>	<i>\$0.022</i>	<i>\$0.021</i>	<i>\$0.023</i>	<i>\$0.014</i>
Transportation	<i>\$0.035</i>	<i>\$0.036</i>	<i>\$0.034</i>	<i>\$0.040</i>	<i>\$0.029</i>	<i>\$0.046</i>
Passenger traffic and services	<i>\$0.055</i>	<i>\$0.055</i>	<i>\$0.054</i>	<i>\$0.054</i>	<i>\$0.042</i>	<i>\$0.052</i>
General and administrative	<i>\$0.045</i>	<i>\$0.046</i>	<i>\$0.045</i>	<i>\$0.046</i>	<i>\$0.041</i>	<i>\$0.045</i>
Total O&M expense	<i>\$0.166</i>	<i>\$0.168</i>	<i>\$0.165</i>	<i>\$0.179</i>	<i>\$0.160</i>	<i>\$0.186</i>
Operating surplus	\$33	\$37	\$38	\$34	\$35	\$46
<i>Operating surplus per passenger-mile (dollars)</i>	<i>\$0.121</i>	<i>\$0.129</i>	<i>\$0.133</i>	<i>\$0.119</i>	<i>\$0.095</i>	<i>\$0.139</i>
Year showing first operating surplus	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000

California South	90	110	125F	125E	New HSR	Maglev
<i>Life-Cycle Measures</i> (All amounts are present values, as of the year 2000, of cash inflows/outflows between 2000 and 2040.)						
Revenues:						
Passenger Transportation Revenues	\$589	\$627	\$635	\$641	\$693	\$812
Income from Ancillary Activities	\$25	\$25	\$27	\$27	\$32	\$35
System Revenues	\$614	\$652	\$662	\$668	\$725	\$848
Less: Total O&M expenses	\$380	\$387	\$386	\$430	\$498	\$531
Operating surplus	\$234	\$265	\$276	\$238	\$227	\$317
Less: Continuing investments	\$28	\$24	\$24	\$24	\$51	\$32
Surplus after continuing investments	\$206	\$241	\$252	\$214	\$176	\$284
Initial investment:						
Initial vehicle investment	\$128	\$141	\$141	\$141	\$209	\$161
Initial infrastructure investment	\$327	\$512	\$549	\$824	\$3,898	\$4,841
Initial investment for ancillary activities	\$4	\$4	\$4	\$4	\$5	\$5
Initial investment, Total	\$459	\$657	\$694	\$969	\$4,112	\$5,006
Percent of total initial investment pertaining to--						
Vehicles	28%	22%	20%	15%	5%	3%
Infrastructure	71%	78%	79%	85%	95%	97%
Ancillary activities	1%	1%	1%	0%	0%	0%
Total initial investment per route-mile	\$3.6	\$5.1	\$5.4	\$7.6	\$29.1	\$40.7
Portion of initial investment that is <u>not</u> covered by surplus after continuing investments	\$253	\$416	\$442	\$755	\$3,936	\$4,722
Percentage of initial investment covered by surplus after continuing investments	45%	37%	36%	22%	4%	6%
Comparison of Benefits and Costs; Assessment of Partnership Potential						
Surplus after continuing investments	\$206	\$241	\$252	\$214	\$176	\$284
Total benefits:						
Benefits to HSGT users:						
System revenues	\$614	\$652	\$662	\$668	\$725	\$848
Users' consumer surplus	\$752	\$807	\$827	\$843	\$976	\$1,249
Total benefits to HSGT users	\$1,366	\$1,459	\$1,488	\$1,511	\$1,701	\$2,096
Benefits to the public at large:						
Airport congestion delay savings						
Operation delays	\$230	\$246	\$251	\$255	\$275	\$322
Passenger delays	\$422	\$451	\$461	\$468	\$505	\$590
Total airport congestion delay savings	\$652	\$697	\$712	\$723	\$780	\$912
Highway delay savings	\$199	\$250	\$271	\$289	\$401	\$643
Emission savings	(\$20)	\$32	\$17	\$83	\$65	\$91
Total benefits to the public at large	\$831	\$979	\$999	\$1,096	\$1,246	\$1,646
Total benefits	\$2,197	\$2,438	\$2,487	\$2,607	\$2,946	\$3,742
Total costs:						
Initial investment	\$459	\$657	\$694	\$969	\$4,112	\$5,006
O&M expense	\$380	\$387	\$386	\$430	\$498	\$531
Continuing investments	\$28	\$24	\$24	\$24	\$51	\$32
Total costs	\$867	\$1,068	\$1,104	\$1,423	\$4,661	\$5,569
Incidence of total costs:						
Costs borne by users	\$614	\$652	\$662	\$668	\$725	\$848
Publicly-borne costs	\$253	\$416	\$442	\$755	\$3,936	\$4,722

California South	90	110	125F	125E	New HSR	Maglev
Total benefits less total costs	\$1,329	\$1,370	\$1,384	\$1,184	(\$1,715)	(\$1,827)
Benefits to HSGT users less costs borne by users	\$752	\$807	\$827	\$843	\$976	\$1,249
Benefits to the public at large less publicly-borne costs	\$578	\$563	\$557	\$341	(\$2,691)	(\$3,076)
Ratio of total benefits to total costs	2.53	2.28	2.25	1.83	0.63	0.67
Ratio of benefits to HSGT users, to costs borne by users	2.22	2.24	2.25	2.26	2.35	2.47
Ratio of benefits to the public at large, to publicly-borne costs	3.28	2.35	2.26	1.45	0.32	0.35
Does this case meet the threshold tests for "partnership potential"?	YES	YES	YES	YES	NO	NO

System Requirements and Performance (Dollars are in millions except as noted.)								
Chicago Hub Network	90	110	125F	125E	150F	150E	New HSR	Maglev
<i>Physical, production, and traffic factors (traffic data is for the year 2020)</i>								
Route-miles	662	662	662	662	662	662	607	646
Trip-time, hours, Detroit-Milwaukee	5.3	4.6	4.4	4.3	4.2	4.2	3.4	2.1
Average train speed (mph)	70	80	84	86	89	88	116	177
Average fare per passenger-mile (dollars)	0.145	0.166	0.181	0.181	0.188	0.188	0.230	0.309
Trains per day in each direction	12	13	13	14	14	14	13	46
Passengers, Millions of Trips (2020)	5.9	6.6	6.6	6.7	6.9	6.9	8.1	9.4
Passenger-Miles, Millions (2020)	1,142	1,313	1,305	1,329	1,375	1,380	1,680	1,900
Average trip length (miles)	193	197	198	198	200	200	207	203
Average trip length as % of route length	29%	30%	30%	30%	30%	30%	34%	31%
HSGT traffic density per route-mile (millions of passenger-miles per route-mile)	1.7	2.0	2.0	2.0	2.1	2.1	2.8	2.9
Percent of air traffic diverted	12.7%	16.4%	16.9%	17.4%	18.5%	18.6%	28.1%	36.7%
Percent of intercity auto traffic diverted	3.7%	4.2%	4.1%	4.1%	4.3%	4.3%	4.4%	4.1%
Percent of HSGT traffic by source:								
Diverted from air	27%	30%	31%	31%	32%	32%	42%	49%
Diverted from auto	41%	40%	39%	39%	38%	38%	33%	28%
Diverted from conventional rail	24%	22%	22%	21%	21%	21%	18%	15%
Diverted from bus	1%	1%	1%	1%	1%	1%	0%	0%
Induced	8%	8%	8%	8%	8%	8%	7%	7%
<i>Operating efficiency factors, 2020</i>								
Train-miles. millions	8.5	9.5	9.5	10.0	10.0	10.0	11.2	23.8
Passenger-miles per train mile	135	138	137	133	137	138	150	80
Seat-miles, millions	2,235	2,517	2,518	2,647	2,645	2,643	3,172	3,571
Load factor	51%	52%	52%	50%	52%	52%	53%	53%
Gross ton-miles, millions	3,065	3,299	3,110	3,168	3,166	3,064	4,378	2,143
Passenger-miles per gross ton-mile	0.37	0.40	0.42	0.42	0.43	0.45	0.38	0.89
Train-hours, millions	0.12	0.12	0.11	0.12	0.11	0.11	0.10	0.13
Passenger-miles per train hour	9,457	11,033	11,491	11,374	12,218	12,129	17,487	14,141
Operating ratio	75%	63%	59%	65%	56%	62%	49%	37%
<i>Operating results for 2020</i>								
Revenues:								
Passenger transportation revenue	\$166	\$217	\$236	\$240	\$258	\$259	\$386	\$587
Income from ancillary activities	\$8	\$10	\$10	\$10	\$10	\$10	\$11	\$13
System revenues	\$174	\$227	\$246	\$250	\$268	\$269	\$397	\$599
<i>Percent of system revenues from ancillary activities</i>	5%	4%	4%	4%	4%	4%	3%	2%
Operating and maintenance expenses:								
Maintenance of way	\$11	\$12	\$14	\$25	\$15	\$28	\$30	\$29
Maintenance of equipment	\$16	\$18	\$18	\$16	\$18	\$17	\$25	\$16
Transportation	\$29	\$32	\$32	\$37	\$32	\$37	\$39	\$63
Passenger traffic and services	\$36	\$40	\$40	\$41	\$42	\$42	\$49	\$60
General and administrative	\$33	\$36	\$37	\$37	\$38	\$38	\$47	\$47
Total O&M expense	\$125	\$138	\$140	\$157	\$146	\$161	\$191	\$215
<i>Per passenger-mile (dollars):</i>								
Maintenance of way	\$0.009	\$0.009	\$0.011	\$0.019	\$0.011	\$0.020	\$0.018	\$0.015
Maintenance of equipment	\$0.014	\$0.013	\$0.013	\$0.012	\$0.013	\$0.012	\$0.015	\$0.008
Transportation	\$0.025	\$0.025	\$0.024	\$0.028	\$0.024	\$0.027	\$0.023	\$0.033
Passenger traffic and services	\$0.032	\$0.031	\$0.031	\$0.031	\$0.030	\$0.030	\$0.029	\$0.032
General and administrative	\$0.029	\$0.028	\$0.028	\$0.028	\$0.028	\$0.028	\$0.028	\$0.025
Total O&M expense	\$0.109	\$0.105	\$0.107	\$0.118	\$0.106	\$0.117	\$0.114	\$0.113
Operating surplus	\$50	\$89	\$106	\$93	\$123	\$108	\$206	\$384
<i>Operating surplus per passenger-mile (dollars)</i>	\$0.044	\$0.068	\$0.081	\$0.070	\$0.089	\$0.078	\$0.123	\$0.202
Year showing first operating surplus	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000

Chicago Hub Network	90	110	125F	125E	150F	150E	New HSR	Maglev
<i>Life-Cycle Measures</i> (All amounts are present values, as of the year 2000, of cash inflows/outflows between 2000 and 2040.)								
Revenues:								
Passenger Transportation Revenues	\$1,331	\$1,754	\$1,899	\$1,935	\$2,086	\$2,093	\$3,128	\$4,859
Income from Ancillary Activities	\$65	\$76	\$77	\$79	\$82	\$82	\$89	\$103
System Revenues	\$1,396	\$1,831	\$1,977	\$2,013	\$2,167	\$2,175	\$3,217	\$4,962
Less: Total O&M expenses	\$1,041	\$1,167	\$1,179	\$1,333	\$1,237	\$1,394	\$1,663	\$1,904
Operating surplus	\$355	\$664	\$798	\$680	\$931	\$781	\$1,554	\$3,058
Less: Continuing investments	\$98	\$104	\$90	\$97	\$95	\$91	\$182	\$85
Surplus after continuing investments	\$257	\$560	\$708	\$584	\$835	\$690	\$1,371	\$2,974
Initial investment:								
Initial vehicle investment	\$360	\$452	\$424	\$424	\$424	\$452	\$730	\$578
Initial infrastructure investment	\$690	\$1,020	\$2,000	\$3,190	\$3,269	\$4,670	\$11,539	\$17,192
Initial investment for ancillary activities	\$13	\$14	\$14	\$15	\$15	\$15	\$15	\$17
Initial investment, Total	\$1,062	\$1,487	\$2,438	\$3,628	\$3,708	\$5,137	\$12,285	\$17,787
Percent of total initial investment pertaining to--								
Vehicles	34%	30%	17%	12%	11%	9%	6%	3%
Infrastructure	65%	69%	82%	88%	88%	91%	94%	97%
Ancillary activities	1%	1%	1%	0%	0%	0%	0%	0%
Total initial investment per route-mile	\$1.6	\$2.2	\$3.7	\$5.5	\$5.6	\$7.8	\$20.3	\$27.5
Portion of initial investment that is <u>not</u> covered by surplus after continuing investments	\$805	\$927	\$1,730	\$3,045	\$2,872	\$4,448	\$10,913	\$14,813
Percentage of initial investment covered by surplus after continuing investments	24%	38%	29%	16%	23%	13%	11%	17%
Comparison of Benefits and Costs; Assessment of Partnership Potential								
Surplus after continuing investments	\$257	\$560	\$708	\$584	\$835	\$690	\$1,371	\$2,974
Total benefits:								
Benefits to HSGT users:								
System revenues	\$1,396	\$1,831	\$1,977	\$2,013	\$2,167	\$2,175	\$3,217	\$4,962
Users' consumer surplus	\$1,888	\$2,363	\$2,392	\$2,454	\$2,594	\$2,606	\$3,478	\$4,491
Total benefits to HSGT users	\$3,283	\$4,194	\$4,368	\$4,468	\$4,761	\$4,781	\$6,694	\$9,453
Benefits to the public at large:								
Airport congestion delay savings								
Operation delays	\$511	\$623	\$642	\$654	\$691	\$694	\$907	\$1,225
Passenger delays	\$951	\$1,158	\$1,194	\$1,217	\$1,285	\$1,290	\$1,671	\$2,254
Total airport congestion delay savings	\$1,462	\$1,780	\$1,836	\$1,871	\$1,976	\$1,984	\$2,578	\$3,480
Highway delay savings	\$611	\$692	\$671	\$686	\$688	\$690	\$688	\$717
Emission savings	\$39	\$115	\$111	\$152	\$80	\$165	\$186	\$175
Total benefits to the public at large	\$2,111	\$2,587	\$2,618	\$2,709	\$2,745	\$2,838	\$3,452	\$4,371
Total benefits	\$5,395	\$6,781	\$6,986	\$7,176	\$7,505	\$7,619	\$10,146	\$13,824
Total costs:								
Initial investment	\$1,062	\$1,487	\$2,438	\$3,628	\$3,708	\$5,137	\$12,285	\$17,787
O&M expense	\$1,041	\$1,167	\$1,179	\$1,333	\$1,237	\$1,394	\$1,663	\$1,904
Continuing investments	\$98	\$104	\$90	\$97	\$95	\$91	\$182	\$85
Total costs	\$2,201	\$2,758	\$3,706	\$5,058	\$5,039	\$6,622	\$14,130	\$19,775
Incidence of total costs:								
Costs borne by users	\$1,396	\$1,831	\$1,977	\$2,013	\$2,167	\$2,175	\$3,217	\$4,962
Publicly-borne costs	\$805	\$927	\$1,730	\$3,045	\$2,872	\$4,448	\$10,913	\$14,813

Chicago Hub Network	90	110	125F	125E	150F	150E	New HSR	Maglev
Total benefits less total costs	\$3,194	\$4,023	\$3,280	\$2,118	\$2,466	\$997	(\$3,984)	(\$5,951)
Benefits to HSGT users less costs borne by users	\$1,888	\$2,363	\$2,392	\$2,454	\$2,594	\$2,606	\$3,478	\$4,491
Benefits to the public at large less publicly-borne costs	\$1,306	\$1,660	\$888	(\$336)	(\$128)	(\$1,609)	(\$7,461)	(\$10,442)
Ratio of total benefits to total costs	2.45	2.46	1.88	1.42	1.49	1.15	0.72	0.70
Ratio of benefits to HSGT users, to costs borne by users	2.35	2.29	2.21	2.22	2.20	2.20	2.08	1.90
Ratio of benefits to the public at large, to publicly-borne costs	2.62	2.79	1.51	0.89	0.96	0.64	0.32	0.30
Does this case meet the threshold tests for "partnership potential"?	YES	YES	YES	YES	YES	YES	NO	NO

System Requirements and Performance (Dollars are in millions except as noted.)								
Chicago-Detroit	90	110	125F	125E	150F	150E	New HSR	Maglev
<i>Physical, production, and traffic factors (traffic data is for the year 2020)</i>								
Route-miles	296	296	296	296	296	296	285	285
Trip-time, hours, Chicago-Detroit	4.3	3.8	3.6	3.6	3.5	3.5	2.4	1.5
Average train speed (mph)	69	79	81	83	85	85	117	190
Average fare per passenger-mile (dollars)	0.134	0.156	0.170	0.170	0.182	0.182	0.240	0.329
Trains per day in each direction	15	17	17	17	17	17	22	44
Passengers, Millions of Trips (2020)	2.3	2.6	2.6	2.6	2.5	2.6	3.5	3.7
Passenger-Miles, Millions (2020)	431	501	494	507	495	498	669	726
Average trip length (miles)	188	192	193	194	194	194	191	194
Average trip length as % of route length	63%	65%	65%	65%	66%	66%	67%	68%
HSGT traffic density per route-mile (millions of passenger-miles per route-mile)	1.5	1.7	1.7	1.7	1.7	1.7	2.3	2.5
Percent of air traffic diverted	12.5%	16.8%	16.9%	17.6%	17.4%	17.6%	33.4%	41.3%
Percent of intercity auto traffic diverted	2.7%	3.0%	2.9%	3.0%	2.8%	2.8%	3.2%	2.7%
Percent of HSGT traffic by source:								
Diverted from air	27%	31%	32%	32%	33%	33%	47%	56%
Diverted from auto	42%	40%	39%	39%	38%	38%	30%	24%
Diverted from conventional rail	23%	20%	20%	20%	20%	20%	15%	14%
Diverted from bus	1%	1%	1%	1%	1%	1%	0%	0%
Induced	8%	8%	8%	8%	8%	8%	7%	7%
<i>Operating efficiency factors, 2020</i>								
Train-miles. millions	3.2	3.7	3.7	3.7	3.7	3.7	4.6	9.2
Passenger-miles per train mile	133	136	134	138	135	135	146	79
Seat-miles, millions	857	971	971	971	971	971	1,303	1,376
Load factor	50%	52%	51%	52%	51%	51%	51%	53%
Gross ton-miles, millions	1,175	1,272	1,199	1,162	1,162	1,125	1,798	826
Passenger-miles per gross ton-mile	0.37	0.39	0.41	0.44	0.43	0.44	0.37	0.88
Train-hours, millions	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.05
Passenger-miles per train hour	9,164	10,698	10,933	11,388	11,406	11,496	17,032	15,005
Operating ratio	94%	77%	68%	80%	69%	77%	57%	38%
<i>Operating results for 2020</i>								
Revenues:								
Passenger transportation revenue	\$58	\$78	\$84	\$86	\$90	\$90	\$160	\$239
Income from ancillary activities	\$3	\$4	\$4	\$4	\$4	\$4	\$5	\$6
System revenues	\$61	\$82	\$88	\$90	\$94	\$94	\$166	\$244
<i>Percent of system revenues from ancillary activities</i>	5%	5%	5%	4%	4%	4%	3%	2%
Operating and maintenance expenses:								
Maintenance of way	\$7	\$7	\$5	\$15	\$10	\$16	\$19	\$14
Maintenance of equipment	\$7	\$8	\$8	\$7	\$8	\$7	\$11	\$7
Transportation	\$11	\$13	\$13	\$14	\$12	\$14	\$17	\$24
Passenger traffic and services	\$14	\$16	\$16	\$16	\$16	\$16	\$21	\$25
General and administrative	\$15	\$17	\$16	\$17	\$17	\$17	\$23	\$21
Total O&M expense	\$54	\$60	\$57	\$69	\$62	\$70	\$91	\$91
<i>Per passenger-mile (dollars):</i>								
Maintenance of way	\$0.015	\$0.014	\$0.009	\$0.029	\$0.020	\$0.032	\$0.029	\$0.019
Maintenance of equipment	\$0.016	\$0.015	\$0.015	\$0.013	\$0.016	\$0.014	\$0.017	\$0.009
Transportation	\$0.026	\$0.026	\$0.026	\$0.028	\$0.025	\$0.028	\$0.025	\$0.034
Passenger traffic and services	\$0.033	\$0.032	\$0.032	\$0.032	\$0.032	\$0.032	\$0.032	\$0.034
General and administrative	\$0.035	\$0.033	\$0.032	\$0.034	\$0.034	\$0.034	\$0.034	\$0.029
Total O&M expense	\$0.125	\$0.120	\$0.115	\$0.135	\$0.126	\$0.140	\$0.136	\$0.125
Operating surplus	\$7	\$22	\$31	\$21	\$31	\$25	\$74	\$154
<i>Operating surplus per passenger-mile (dollars)</i>	\$0.016	\$0.044	\$0.063	\$0.042	\$0.064	\$0.050	\$0.111	\$0.212
Year showing first operating surplus	Year 2002	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000

Chicago-Detroit	90	110	125F	125E	150F	150E	New HSR	Maglev
Life-Cycle Measures (All amounts are present values, as of the year 2000, of cash inflows/outflows between 2000 and 2040.)								
Revenues:								
Passenger Transportation Revenues	\$453	\$620	\$664	\$684	\$713	\$718	\$1,286	\$1,951
Income from Ancillary Activities	\$26	\$31	\$31	\$32	\$31	\$31	\$41	\$45
System Revenues	\$479	\$652	\$696	\$715	\$745	\$749	\$1,327	\$1,996
Less: Total O&M expenses	\$449	\$503	\$472	\$598	\$531	\$604	\$798	\$801
Operating surplus	\$30	\$148	\$223	\$117	\$214	\$145	\$529	\$1,195
Less: Continuing investments	\$45	\$34	\$34	\$35	\$30	\$30	\$72	\$35
Surplus after continuing investments	(\$16)	\$114	\$189	\$82	\$184	\$115	\$457	\$1,160
Initial investment:								
Initial vehicle investment	\$141	\$184	\$184	\$184	\$155	\$155	\$287	\$241
Initial infrastructure investment	\$338	\$498	\$961	\$1,558	\$1,168	\$1,784	\$4,989	\$6,796
Initial investment for ancillary activities	\$5	\$6	\$6	\$6	\$6	\$6	\$8	\$8
Initial investment, Total	\$484	\$688	\$1,151	\$1,748	\$1,329	\$1,945	\$5,284	\$7,044
Percent of total initial investment pertaining to--								
Vehicles	29%	27%	16%	11%	12%	8%	5%	3%
Infrastructure	70%	72%	84%	89%	88%	92%	94%	96%
Ancillary activities	1%	1%	1%	0%	0%	0%	0%	0%
Total initial investment per route-mile	\$1.6	\$2.3	\$3.9	\$5.9	\$4.5	\$6.6	\$18.5	\$24.7
Portion of initial investment that is <u>not</u> covered by surplus after continuing investments	\$500	\$573	\$961	\$1,666	\$1,146	\$1,831	\$4,826	\$5,885
Percentage of initial investment covered by surplus after continuing investments	(3%)	17%	16%	5%	14%	6%	9%	16%
Comparison of Benefits and Costs; Assessment of Partnership Potential								
Surplus after continuing investments	(\$16)	\$114	\$189	\$82	\$184	\$115	\$457	\$1,160
Total benefits:								
Benefits to HSGT users:								
System revenues	\$479	\$652	\$696	\$715	\$745	\$749	\$1,327	\$1,996
Users' consumer surplus	\$635	\$811	\$804	\$837	\$813	\$820	\$1,380	\$1,721
Total benefits to HSGT users	\$1,113	\$1,463	\$1,500	\$1,552	\$1,558	\$1,570	\$2,707	\$3,717
Benefits to the public at large:								
Airport congestion delay savings								
Operation delays	\$204	\$260	\$264	\$273	\$273	\$275	\$449	\$615
Passenger delays	\$385	\$490	\$498	\$514	\$515	\$519	\$829	\$1,141
Total airport congestion delay savings	\$589	\$750	\$762	\$787	\$788	\$794	\$1,278	\$1,756
Highway delay savings	\$250	\$279	\$267	\$275	\$260	\$262	\$296	\$251
Emission savings	\$5	\$32	\$31	\$44	\$19	\$46	\$68	\$58
Total benefits to the public at large	\$844	\$1,061	\$1,060	\$1,106	\$1,067	\$1,102	\$1,642	\$2,066
Total benefits	\$1,958	\$2,524	\$2,559	\$2,658	\$2,625	\$2,672	\$4,349	\$5,783
Total costs:								
Initial investment	\$484	\$688	\$1,151	\$1,748	\$1,329	\$1,945	\$5,284	\$7,044
O&M expense	\$449	\$503	\$472	\$598	\$531	\$604	\$798	\$801
Continuing investments	\$45	\$34	\$34	\$35	\$30	\$30	\$72	\$35
Total costs	\$979	\$1,225	\$1,657	\$2,381	\$1,890	\$2,580	\$6,154	\$7,881
Incidence of total costs:								
Costs borne by users	\$479	\$652	\$696	\$715	\$745	\$749	\$1,327	\$1,996
Publicly-borne costs	\$500	\$573	\$961	\$1,666	\$1,146	\$1,831	\$4,826	\$5,885

Chicago-Detroit	90	110	125F	125E	150F	150E	New HSR	Maglev
Total benefits less total costs	\$979	\$1,300	\$902	\$277	\$735	\$92	(\$1,805)	(\$2,098)
Benefits to HSGT users less costs borne by users	\$635	\$811	\$804	\$837	\$813	\$820	\$1,380	\$1,721
Benefits to the public at large less publicly-borne costs	\$344	\$488	\$98	(\$560)	(\$79)	(\$729)	(\$3,184)	(\$3,819)
Ratio of total benefits to total costs	2.00	2.06	1.54	1.12	1.39	1.04	0.71	0.73
Ratio of benefits to HSGT users, to costs borne by users	2.33	2.25	2.16	2.17	2.09	2.09	2.04	1.86
Ratio of benefits to the public at large, to publicly-borne costs	1.69	1.85	1.10	0.66	0.93	0.60	0.34	0.35
Does this case meet the threshold tests for "partnership potential"?	NO	YES	YES	YES	YES	YES	NO	NO

System Requirements and Performance (Dollars are in millions except as noted.)								
Chicago-St. Louis	90	110	125F	125E	150F	150E	New HSR	Maglev
<i>Physical, production, and traffic factors (traffic data is for the year 2020)</i>								
Route-miles	297	297	297	297	297	297	301	301
Trip-time, hours, Chicago-Saint Louis	4.2	3.6	3.3	3.3	3.0	3.0	2.2	1.5
Average train speed (mph)	73	83	90	90	98	98	138	203
Average fare per passenger-mile (dollars)	0.147	0.167	0.188	0.188	0.187	0.187	0.218	0.290
Trains per day in each direction	10	13	12	12	14	14	16	32
Passengers, Millions of Trips (2020)	1.4	1.7	1.7	1.7	1.9	1.9	2.2	2.3
Passenger-Miles, Millions (2020)	291	362	355	360	414	417	499	531
Average trip length (miles)	209	211	213	214	217	217	227	229
Average trip length as % of route length	71%	71%	72%	72%	73%	73%	75%	76%
HSGT traffic density per route-mile (millions of passenger-miles per route-mile)	1.0	1.2	1.2	1.2	1.4	1.4	1.7	1.8
Percent of air traffic diverted	10.5%	16.4%	17.4%	17.8%	22.0%	22.2%	29.7%	35.5%
Percent of intercity auto traffic diverted	4.0%	5.0%	4.5%	4.5%	5.2%	5.2%	5.5%	5.1%
Percent of HSGT traffic by source:								
Diverted from air	25%	31%	34%	34%	37%	37%	43%	48%
Diverted from auto	36%	35%	33%	33%	33%	33%	30%	26%
Diverted from conventional rail	28%	23%	24%	23%	21%	21%	18%	17%
Diverted from bus	2%	2%	1%	1%	1%	1%	1%	0%
Induced	8%	8%	8%	8%	8%	8%	8%	8%
<i>Operating efficiency factors, 2020</i>								
Train-miles. millions	2.2	2.8	2.6	2.6	3.0	3.0	3.5	7.0
Passenger-miles per train mile	131	128	136	138	136	137	141	76
Seat-miles, millions	588	746	689	689	803	803	1,006	1,055
Load factor	49%	48%	52%	52%	52%	52%	50%	50%
Gross ton-miles, millions	806	978	850	824	962	931	1,389	633
Passenger-miles per gross ton-mile	0.36	0.37	0.42	0.44	0.43	0.45	0.36	0.84
Train-hours, millions	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Passenger-miles per train hour	9,541	10,664	12,181	12,482	13,327	13,452	19,405	15,319
Operating ratio	83%	70%	61%	67%	60%	67%	65%	45%
<i>Operating results for 2020</i>								
Revenues:								
Passenger transportation revenue	\$43	\$60	\$67	\$68	\$78	\$78	\$109	\$154
Income from ancillary activities	\$2	\$2	\$2	\$2	\$2	\$3	\$3	\$3
System revenues	\$44	\$63	\$69	\$70	\$80	\$81	\$112	\$157
<i>Percent of system revenues from ancillary activities</i>	4%	4%	3%	3%	3%	3%	2%	2%
Operating and maintenance expenses:								
Maintenance of way	\$3	\$3	\$3	\$7	\$4	\$9	\$18	\$14
Maintenance of equipment	\$5	\$6	\$5	\$5	\$6	\$6	\$9	\$5
Transportation	\$8	\$10	\$9	\$10	\$10	\$11	\$12	\$18
Passenger traffic and services	\$10	\$11	\$11	\$11	\$12	\$13	\$14	\$16
General and administrative	\$11	\$13	\$12	\$12	\$14	\$14	\$18	\$16
Total O&M expense	\$35	\$42	\$41	\$45	\$46	\$53	\$70	\$69
<i>Per passenger-mile (dollars):</i>								
Maintenance of way	\$0.009	\$0.008	\$0.009	\$0.019	\$0.009	\$0.022	\$0.036	\$0.026
Maintenance of equipment	\$0.017	\$0.016	\$0.015	\$0.014	\$0.015	\$0.014	\$0.017	\$0.010
Transportation	\$0.026	\$0.027	\$0.024	\$0.027	\$0.024	\$0.027	\$0.024	\$0.034
Passenger traffic and services	\$0.033	\$0.031	\$0.031	\$0.031	\$0.030	\$0.030	\$0.028	\$0.030
General and administrative	\$0.037	\$0.035	\$0.035	\$0.035	\$0.034	\$0.034	\$0.035	\$0.030
Total O&M expense	\$0.122	\$0.117	\$0.115	\$0.126	\$0.112	\$0.126	\$0.141	\$0.130
Operating surplus	\$9	\$20	\$28	\$25	\$34	\$28	\$41	\$88
<i>Operating surplus per passenger-mile (dollars)</i>	\$0.031	\$0.056	\$0.080	\$0.068	\$0.082	\$0.068	\$0.083	\$0.165
Year showing first operating surplus	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000

Chicago-St. Louis	90	110	125F	125E	150F	150E	New HSR	Maglev
<i>Life-Cycle Measures</i> (All amounts are present values, as of the year 2000, of cash inflows/outflows between 2000 and 2040.)								
Revenues:								
Passenger Transportation Revenues	\$330	\$477	\$524	\$532	\$616	\$620	\$871	\$1,262
Income from Ancillary Activities	\$13	\$17	\$17	\$18	\$20	\$20	\$22	\$24
System Revenues	\$344	\$494	\$541	\$550	\$636	\$640	\$893	\$1,286
Less: Total O&M expenses	\$291	\$349	\$346	\$393	\$388	\$453	\$616	\$621
Operating surplus	\$53	\$145	\$196	\$157	\$248	\$186	\$277	\$664
Less: Continuing investments	\$20	\$34	\$26	\$26	\$32	\$32	\$59	\$46
Surplus after continuing investments	\$33	\$111	\$169	\$131	\$215	\$154	\$218	\$618
Initial investment:								
Initial vehicle investment	\$116	\$155	\$155	\$155	\$155	\$155	\$235	\$144
Initial infrastructure investment	\$382	\$498	\$916	\$1,358	\$1,833	\$2,458	\$5,661	\$9,143
Initial investment for ancillary activities	\$3	\$3	\$3	\$3	\$3	\$3	\$4	\$4
Initial investment, Total	\$500	\$657	\$1,074	\$1,516	\$1,991	\$2,617	\$5,900	\$9,291
<i>Percent of total initial investment pertaining to--</i>								
Vehicles	23%	24%	14%	10%	8%	6%	4%	2%
Infrastructure	76%	76%	85%	90%	92%	94%	96%	98%
Ancillary activities	1%	0%	0%	0%	0%	0%	0%	0%
<i>Total initial investment per route-mile</i>	\$1.7	\$2.2	\$3.6	\$5.1	\$6.7	\$8.8	\$19.6	\$30.9
Portion of initial investment that is <u>not</u> covered by surplus after continuing investments	\$468	\$545	\$905	\$1,385	\$1,776	\$2,463	\$5,682	\$8,673
Percentage of initial investment covered by surplus after continuing investments	7%	17%	16%	9%	11%	6%	4%	7%
Comparison of Benefits and Costs; Assessment of Partnership Potential								
Surplus after continuing investments	\$33	\$111	\$169	\$131	\$215	\$154	\$218	\$618
Total benefits:								
Benefits to HSGT users:								
System revenues	\$344	\$494	\$541	\$550	\$636	\$640	\$893	\$1,286
Users' consumer surplus	\$459	\$642	\$649	\$662	\$799	\$805	\$1,027	\$1,225
Total benefits to HSGT users	\$803	\$1,136	\$1,190	\$1,211	\$1,434	\$1,445	\$1,920	\$2,511
Benefits to the public at large:								
Airport congestion delay savings								
Operation delays	\$111	\$164	\$171	\$174	\$206	\$208	\$263	\$308
Passenger delays	\$202	\$295	\$309	\$314	\$372	\$375	\$473	\$554
Total airport congestion delay savings	\$313	\$459	\$480	\$489	\$579	\$583	\$735	\$861
Highway delay savings	\$40	\$50	\$45	\$46	\$52	\$53	\$57	\$53
Emission savings	\$5	\$27	\$26	\$39	\$23	\$47	\$53	\$48
Total benefits to the public at large	\$359	\$536	\$551	\$573	\$654	\$683	\$845	\$963
Total benefits	\$1,162	\$1,672	\$1,740	\$1,785	\$2,088	\$2,128	\$2,765	\$3,474
Total costs:								
Initial investment	\$500	\$657	\$1,074	\$1,516	\$1,991	\$2,617	\$5,900	\$9,291
O&M expense	\$291	\$349	\$346	\$393	\$388	\$453	\$616	\$621
Continuing investments	\$20	\$34	\$26	\$26	\$32	\$32	\$59	\$46
Total costs	\$811	\$1,040	\$1,446	\$1,935	\$2,412	\$3,102	\$6,575	\$9,959
Incidence of total costs:								
Costs borne by users	\$344	\$494	\$541	\$550	\$636	\$640	\$893	\$1,286
Publicly-borne costs	\$468	\$545	\$905	\$1,385	\$1,776	\$2,463	\$5,682	\$8,673

Chicago-St. Louis	90	110	125F	125E	150F	150E	New HSR	Maglev
Total benefits less total costs	\$350	\$632	\$294	(\$151)	(\$324)	(\$974)	(\$3,810)	(\$6,485)
Benefits to HSGT users less costs borne by users	\$459	\$642	\$649	\$662	\$799	\$805	\$1,027	\$1,225
Benefits to the public at large less publicly-borne costs	(\$109)	(\$10)	(\$354)	(\$812)	(\$1,123)	(\$1,779)	(\$4,837)	(\$7,710)
Ratio of total benefits to total costs	1.43	1.61	1.20	0.92	0.87	0.69	0.42	0.35
Ratio of benefits to HSGT users, to costs borne by users	2.34	2.30	2.20	2.20	2.26	2.26	2.15	1.95
Ratio of benefits to the public at large, to publicly-borne costs	0.77	0.98	0.61	0.41	0.37	0.28	0.15	0.11
Does this case meet the threshold tests for "partnership potential"?	YES	YES	YES	NO	NO	NO	NO	NO

System Requirements and Performance (Dollars are in millions except as noted.)						
Florida	90	110	125F	125E	New HSR	Maglev
<i>Physical, production, and traffic factors (traffic data is for the year 2020)</i>						
Route-miles	306	306	306	306	317	317
Trip-time, hours, Miami-Tampa	3.4	3.0	2.9	2.7	2.6	1.9
Average train speed (mph)	74	85	89	92	120	171
Average fare per passenger-mile (dollars)	0.213	0.226	0.224	0.223	0.274	0.337
Trains per day in each direction	8	9	9	9	30	59
Passengers, Millions of Trips (2020)	3.2	3.3	3.6	3.6	7.0	7.1
Passenger-Miles, Millions (2020)	406	456	487	507	937	984
Average trip length (miles)	129	136	137	140	134	139
Average trip length as % of route length	42%	45%	45%	46%	42%	44%
HSGT traffic density per route-mile (millions of passenger-miles per route-mile)	1.3	1.5	1.6	1.7	3.0	3.1
Percent of air traffic diverted	6.1%	7.7%	8.1%	8.5%	20.8%	25.1%
Percent of intercity auto traffic diverted	1.9%	2.1%	2.2%	2.3%	4.0%	3.8%
Percent of HSGT traffic by source:						
Diverted from air	14%	17%	16%	17%	24%	28%
Diverted from auto	71%	69%	69%	69%	65%	62%
Diverted from conventional rail	4%	4%	4%	4%	2%	2%
Diverted from bus	2%	2%	2%	2%	1%	1%
Induced	9%	9%	9%	9%	8%	8%
<i>Operating efficiency factors, 2020</i>						
Train-miles, millions	3.2	3.6	3.7	3.9	6.9	13.6
Passenger-miles per train mile	126	127	133	131	135	72
Seat-miles, millions	852	951	969	1,019	1,969	2,045
Load factor	48%	48%	50%	50%	48%	48%
Gross ton-miles, millions	1,168	1,247	1,196	1,220	2,717	1,227
Passenger-miles per gross ton-mile	0.35	0.37	0.41	0.42	0.34	0.80
Train-hours, millions	0.04	0.04	0.04	0.04	0.06	0.08
Passenger-miles per train hour	9,354	10,778	11,753	12,051	16,245	12,316
Operating ratio	64%	58%	56%	61%	48%	38%
<i>Operating results for 2020</i>						
Revenues:						
Passenger transportation revenue	\$87	\$103	\$109	\$113	\$256	\$332
Income from ancillary activities	\$4	\$4	\$4	\$4	\$9	\$10
System revenues	\$90	\$107	\$113	\$117	\$266	\$342
<i>Percent of system revenues from ancillary activities</i>	<i>4%</i>	<i>4%</i>	<i>4%</i>	<i>4%</i>	<i>4%</i>	<i>3%</i>
Operating and maintenance expenses:						
Maintenance of way	\$3	\$3	\$3	\$8	\$18	\$15
Maintenance of equipment	\$7	\$8	\$8	\$8	\$16	\$9
Transportation	\$12	\$14	\$13	\$16	\$23	\$35
Passenger traffic and services	\$17	\$18	\$19	\$19	\$35	\$38
General and administrative	\$16	\$17	\$18	\$18	\$31	\$29
Total O&M expense	\$55	\$60	\$61	\$68	\$122	\$127
<i>Per passenger-mile (dollars):</i>						
<i>Maintenance of way</i>	<i>\$0.006</i>	<i>\$0.006</i>	<i>\$0.006</i>	<i>\$0.015</i>	<i>\$0.019</i>	<i>\$0.015</i>
<i>Maintenance of equipment</i>	<i>\$0.018</i>	<i>\$0.017</i>	<i>\$0.017</i>	<i>\$0.015</i>	<i>\$0.017</i>	<i>\$0.010</i>
<i>Transportation</i>	<i>\$0.030</i>	<i>\$0.030</i>	<i>\$0.028</i>	<i>\$0.031</i>	<i>\$0.024</i>	<i>\$0.035</i>
<i>Passenger traffic and services</i>	<i>\$0.042</i>	<i>\$0.040</i>	<i>\$0.039</i>	<i>\$0.038</i>	<i>\$0.037</i>	<i>\$0.039</i>
<i>General and administrative</i>	<i>\$0.039</i>	<i>\$0.037</i>	<i>\$0.036</i>	<i>\$0.036</i>	<i>\$0.033</i>	<i>\$0.029</i>
<i>Total O&M expense</i>	<i>\$0.135</i>	<i>\$0.131</i>	<i>\$0.126</i>	<i>\$0.135</i>	<i>\$0.130</i>	<i>\$0.129</i>
Operating surplus	\$35	\$48	\$52	\$49	\$144	\$215
<i>Operating surplus per passenger-mile (dollars)</i>	<i>\$0.087</i>	<i>\$0.105</i>	<i>\$0.107</i>	<i>\$0.096</i>	<i>\$0.153</i>	<i>\$0.219</i>
Year showing first operating surplus	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000

Florida	90	110	125F	125E	New HSR	Maglev
Life-Cycle Measures (All amounts are present values, as of the year 2000, of cash inflows/outflows between 2000 and 2040.)						
Revenues:						
Passenger Transportation Revenues	\$636	\$759	\$802	\$833	\$1,986	\$2,641
Income from Ancillary Activities	\$28	\$31	\$32	\$33	\$73	\$77
System Revenues	\$663	\$790	\$834	\$865	\$2,060	\$2,718
Less: Total O&M expenses	\$462	\$482	\$499	\$562	\$1,028	\$1,091
Operating surplus	\$201	\$307	\$334	\$303	\$1,032	\$1,627
Less: Continuing investments	\$49	\$64	\$64	\$65	\$116	\$75
Surplus after continuing investments	\$152	\$244	\$270	\$239	\$915	\$1,552
Initial investment:						
Initial vehicle investment	\$218	\$198	\$198	\$198	\$339	\$241
Initial infrastructure investment	\$1,011	\$1,101	\$1,290	\$1,837	\$3,961	\$6,796
Initial investment for ancillary activities	\$6	\$6	\$6	\$6	\$17	\$17
Initial investment, Total	\$1,235	\$1,305	\$1,494	\$2,041	\$4,316	\$7,054
Percent of total initial investment pertaining to--						
Vehicles	18%	15%	13%	10%	8%	3%
Infrastructure	82%	84%	86%	90%	92%	96%
Ancillary activities	0%	0%	0%	0%	0%	0%
Total initial investment per route-mile	\$4.0	\$4.3	\$4.9	\$6.7	\$13.6	\$22.3
Portion of initial investment that is <u>not</u> covered by surplus after continuing investments	\$1,082	\$1,061	\$1,224	\$1,802	\$3,401	\$5,502
Percentage of initial investment covered by surplus after continuing investments	12%	19%	18%	12%	21%	22%
Comparison of Benefits and Costs; Assessment of Partnership Potential						
Surplus after continuing investments	\$152	\$244	\$270	\$239	\$915	\$1,552
Total benefits:						
Benefits to HSGT users:						
System revenues	\$663	\$790	\$834	\$865	\$2,060	\$2,718
Users' consumer surplus	\$681	\$787	\$847	\$886	\$2,435	\$2,781
Total benefits to HSGT users	\$1,344	\$1,577	\$1,680	\$1,752	\$4,494	\$5,499
Benefits to the public at large:						
Airport congestion delay savings						
Operation delays	\$73	\$89	\$95	\$98	\$193	\$232
Passenger delays	\$127	\$157	\$165	\$173	\$338	\$405
Total airport congestion delay savings	\$199	\$247	\$260	\$271	\$530	\$637
Highway delay savings	\$383	\$398	\$422	\$430	\$561	\$608
Emission savings	\$15	\$31	\$30	\$43	\$85	\$74
Total benefits to the public at large	\$597	\$675	\$712	\$743	\$1,176	\$1,319
Total benefits	\$1,941	\$2,252	\$2,392	\$2,495	\$5,671	\$6,818
Total costs:						
Initial investment	\$1,235	\$1,305	\$1,494	\$2,041	\$4,316	\$7,054
O&M expense	\$462	\$482	\$499	\$562	\$1,028	\$1,091
Continuing investments	\$49	\$64	\$64	\$65	\$116	\$75
Total costs	\$1,746	\$1,850	\$2,057	\$2,668	\$5,461	\$8,220
Incidence of total costs:						
Costs borne by users	\$663	\$790	\$834	\$865	\$2,060	\$2,718
Publicly-borne costs	\$1,082	\$1,061	\$1,224	\$1,802	\$3,401	\$5,502
Total benefits less total costs	\$195	\$402	\$335	(\$173)	\$210	(\$1,402)
Benefits to HSGT users less costs borne by users	\$681	\$787	\$847	\$886	\$2,435	\$2,781
Benefits to the public at large less publicly-borne costs	(\$486)	(\$385)	(\$512)	(\$1,059)	(\$2,225)	(\$4,183)
Ratio of total benefits to total costs	1.11	1.22	1.16	0.94	1.04	0.83

Florida	90	110	125F	125E	New HSR	Maglev
Ratio of benefits to HSGT users, to costs borne by users	2.03	2.00	2.02	2.02	2.18	2.02
Ratio of benefits to the public at large, to publicly-borne costs	0.55	0.64	0.58	0.41	0.35	0.24
Does this case meet the threshold tests for "partnership potential"?	YES	YES	YES	NO	YES	NO

System Requirements and Performance (Dollars are in millions except as noted.)		
Northeast Corridor	New HSR	Maglev
<i>Physical, production, and traffic factors (traffic data is for the year 2020)</i>		
Route-miles	441	441
Trip-time, hours, New York-Boston	1.7	1.1
Average train speed (mph)	110	163
Average fare per passenger-mile (dollars)	0.332	0.379
Trains per day in each direction	181	166
Passengers, Millions of Trips (2020)	24.8	25.8
Passenger-Miles, Millions (2020)	4,773	5,094
Average trip length (miles)	193	198
Average trip length as % of route length	44%	45%
HSGT traffic density per route-mile (millions of passenger-miles per route-mile)	10.8	11.5
Percent of air traffic diverted	27.0%	35.2%
Percent of intercity auto traffic diverted	0.7%	0.7%
Percent of HSGT traffic by source:		
Diverted from air	22%	27%
Diverted from auto	2%	2%
Diverted from conventional rail	70%	66%
Diverted from bus	0%	0%
Induced	5%	5%
<i>Operating efficiency factors, 2020</i>		
Train-miles, millions	39.4	36.7
Passenger-miles per train mile	121	139
Seat-miles, millions	11,203	11,932
Load factor	43%	43%
Gross ton-miles, millions	15,463	6,609
Passenger-miles per gross ton-mile	0.31	0.77
Train-hours, millions	0.36	0.23
Passenger-miles per train hour	13,306	22,612
Operating ratio	34%	26%
<i>Operating results for 2020</i>		
Revenues:		
Passenger transportation revenue	\$1,587	\$1,931
Income from ancillary activities	\$43	\$45
System revenues	\$1,630	\$1,976
<i>Percent of system revenues from ancillary activities</i>	3%	2%
Operating and maintenance expenses:		
Maintenance of way	\$43	\$33
Maintenance of equipment	\$88	\$53
Transportation	\$138	\$154
Passenger traffic and services	\$156	\$160
General and administrative	\$114	\$95
Total O&M expense	\$540	\$494
<i>Per passenger-mile (dollars):</i>		
Maintenance of way	\$0.009	\$0.006
Maintenance of equipment	\$0.018	\$0.010
Transportation	\$0.029	\$0.030
Passenger traffic and services	\$0.033	\$0.031
General and administrative	\$0.024	\$0.019
Total O&M expense	\$0.113	\$0.097
Operating surplus	\$1,090	\$1,482
<i>Operating surplus per passenger-mile (dollars)</i>	\$0.228	\$0.291
Year showing first operating surplus	Year 2000	Year 2000

Northeast Corridor	New HSR	Maglev
<i>Life-Cycle Measures</i> (All amounts are present values, as of the year 2000, of cash inflows/outflows between 2000 and 2040.)		
Revenues:		
Passenger Transportation Revenues	\$13,089	\$15,917
Income from Ancillary Activities	\$353	\$367
System Revenues	\$13,442	\$16,285
Less: Total O&M expenses	\$4,687	\$4,328
Operating surplus	\$8,755	\$11,956
Less: Continuing investments	\$478	\$349
Surplus after continuing investments	\$8,277	\$11,607
Initial investment:		
Initial vehicle investment	\$1,826	\$1,541
Initial infrastructure investment	\$17,232	\$20,524
Initial investment for ancillary activities	\$70	\$73
Initial investment, Total	\$19,127	\$22,137
<i>Percent of total initial investment pertaining to--</i>		
Vehicles	10%	7%
Infrastructure	90%	93%
Ancillary activities	0%	0%
<i>Total initial investment per route-mile</i>	\$43.4	\$50.2
Portion of initial investment that is <u>not</u> covered by surplus after continuing investments	\$10,851	\$10,530
Percentage of initial investment covered by surplus after continuing investments	43%	52%
Comparison of Benefits and Costs; Assessment of Partnership Potential		
Surplus after continuing investments	\$8,277	\$11,607
Total benefits:		
Benefits to HSGT users:		
System revenues	\$13,442	\$16,285
Users' consumer surplus	\$7,861	\$8,538
Total benefits to HSGT users	\$21,303	\$24,823
Benefits to the public at large:		
Airport congestion delay savings		
Operation delays	\$1,055	\$1,256
Passenger delays	\$1,792	\$2,133
Total airport congestion delay savings	\$2,847	\$3,389
Highway delay savings	\$639	\$634
Emission savings	\$152	\$98
Total benefits to the public at large	\$3,638	\$4,121
Total benefits	\$24,941	\$28,943
Total costs:		
Initial investment	\$19,127	\$22,137
O&M expense	\$4,687	\$4,328
Continuing investments	\$478	\$349
Total costs	\$24,293	\$26,815
Incidence of total costs:		
Costs borne by users	\$13,442	\$16,285
Publicly-borne costs	\$10,851	\$10,530

Northeast Corridor	New HSR	Maglev
Total benefits less total costs	\$648	\$2,128
Benefits to HSGT users less costs borne by users	\$7,861	\$8,538
Benefits to the public at large less publicly-borne costs	(\$7,213)	(\$6,410)
Ratio of total benefits to total costs	1.03	1.08
Ratio of benefits to HSGT users, to costs borne by users	1.58	1.52
Ratio of benefits to the public at large, to publicly-borne costs	0.34	0.39
Does this case meet the threshold tests for "partnership potential"?	YES	YES

System Requirements and Performance (Dollars are in millions except as noted.)						
Pacific Northwest	90	110	125F	125E	New HSR	Maglev
<i>Physical, production, and traffic factors (traffic data is for the year 2020)</i>						
Route-miles	470	469	469	469	451	454
Trip-time, hours, Eugene-Vancouver, BC	7.3	6.4	6.2	6.1	4.1	3.1
Average train speed (mph)	64	74	76	77	109	144
Average fare per passenger-mile (dollars)	0.203	0.248	0.248	0.247	0.339	0.413
Trains per day in each direction	15	15	15	15	17	35
Passengers, Millions of Trips (2020)	3.2	3.1	3.2	3.2	3.5	3.7
Passenger-Miles, Millions (2020)	493	482	497	501	545	574
Average trip length (miles)	152	155	155	155	154	154
Average trip length as % of route length	32%	33%	33%	33%	34%	34%
HSGT traffic density per route-mile (millions of passenger-miles per route-mile)	1.0	1.0	1.1	1.1	1.2	1.3
Percent of air traffic diverted	29.0%	30.9%	31.7%	32.0%	45.7%	53.3%
Percent of intercity auto traffic diverted	3.5%	3.3%	3.5%	3.5%	3.7%	3.6%
Percent of HSGT traffic by source:						
Diverted from air	24%	27%	27%	27%	34%	38%
Diverted from auto	48%	47%	47%	47%	44%	41%
Diverted from conventional rail	12%	12%	12%	12%	11%	10%
Diverted from bus	7%	5%	6%	6%	4%	2%
Induced	9%	9%	9%	9%	9%	8%
<i>Operating efficiency factors, 2020</i>						
Train-miles, millions	5.1	5.1	5.1	5.1	5.6	11.6
Passenger-miles per train mile	96	94	97	98	97	49
Seat-miles, millions	1,356	1,356	1,356	1,356	1,590	1,741
Load factor	36%	36%	37%	37%	34%	33%
Gross ton-miles, millions	1,859	1,777	1,674	1,623	2,194	1,045
Passenger-miles per gross ton-mile	0.27	0.27	0.30	0.31	0.25	0.55
Train-hours, millions	0.08	0.07	0.07	0.07	0.05	0.08
Passenger-miles per train hour	6,146	6,903	7,347	7,502	10,621	7,137
Operating ratio	73%	61%	59%	60%	55%	47%
<i>Operating results for 2020</i>						
Revenues:						
Passenger transportation revenue	\$100	\$119	\$123	\$124	\$184	\$237
Income from ancillary activities	\$4	\$3	\$4	\$4	\$4	\$4
System revenues	\$104	\$123	\$127	\$128	\$189	\$241
<i>Percent of system revenues from ancillary activities</i>	3%	3%	3%	3%	2%	2%
Operating and maintenance expenses:						
Maintenance of way	\$6	\$6	\$6	\$8	\$24	\$25
Maintenance of equipment	\$10	\$10	\$10	\$9	\$13	\$8
Transportation	\$18	\$18	\$18	\$19	\$20	\$30
Passenger traffic and services	\$21	\$20	\$20	\$20	\$23	\$26
General and administrative	\$19	\$19	\$19	\$19	\$23	\$23
Total O&M expense	\$73	\$72	\$73	\$75	\$102	\$112
<i>Per passenger-mile (dollars):</i>						
Maintenance of way	\$0.011	\$0.013	\$0.013	\$0.015	\$0.044	\$0.043
Maintenance of equipment	\$0.020	\$0.020	\$0.020	\$0.017	\$0.023	\$0.015
Transportation	\$0.036	\$0.037	\$0.035	\$0.039	\$0.037	\$0.053
Passenger traffic and services	\$0.042	\$0.042	\$0.041	\$0.041	\$0.042	\$0.045
General and administrative	\$0.038	\$0.039	\$0.038	\$0.037	\$0.042	\$0.040
Total O&M expense	\$0.148	\$0.150	\$0.147	\$0.149	\$0.188	\$0.196
Operating surplus	\$31	\$51	\$54	\$53	\$86	\$129
<i>Operating surplus per passenger-mile (dollars)</i>	\$0.062	\$0.105	\$0.108	\$0.106	\$0.158	\$0.225
Year showing first operating surplus	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000

Pacific Northwest	90	110	125F	125E	New HSR	Maglev
<i>Life-Cycle Measures</i> (All amounts are present values, as of the year 2000, of cash inflows/outflows between 2000 and 2040.)						
Revenues:						
Passenger Transportation Revenues	\$783	\$937	\$967	\$976	\$1,460	\$1,900
Income from Ancillary Activities	\$27	\$27	\$29	\$29	\$33	\$35
System Revenues	\$810	\$964	\$996	\$1,004	\$1,492	\$1,935
Less: Total O&M expenses	\$590	\$589	\$595	\$620	\$893	\$985
Operating surplus	\$220	\$375	\$401	\$385	\$599	\$951
Less: Continuing investments	\$40	\$42	\$42	\$61	\$78	\$92
Surplus after continuing investments	\$181	\$333	\$359	\$324	\$521	\$859
Initial investment:						
Initial vehicle investment	\$141	\$155	\$155	\$155	\$339	\$241
Initial infrastructure investment	\$452	\$699	\$1,073	\$1,916	\$7,475	\$13,734
Initial investment for ancillary activities	\$5	\$4	\$5	\$5	\$5	\$5
Initial investment, Total	\$598	\$859	\$1,233	\$2,076	\$7,819	\$13,980
<i>Percent of total initial investment pertaining to--</i>						
Vehicles	24%	18%	13%	7%	4%	2%
Infrastructure	76%	81%	87%	92%	96%	98%
Ancillary activities	1%	1%	0%	0%	0%	0%
<i>Total initial investment per route-mile</i>	\$1.3	\$1.8	\$2.6	\$4.4	\$17.3	\$30.8
Portion of initial investment that is <u>not</u> covered by surplus after continuing investments	\$417	\$526	\$873	\$1,752	\$7,298	\$13,121
Percentage of initial investment covered by surplus after continuing investments	30%	39%	29%	16%	7%	6%
Comparison of Benefits and Costs; Assessment of Partnership Potential						
Surplus after continuing investments	\$181	\$333	\$359	\$324	\$521	\$859
Total benefits:						
Benefits to HSGT users:						
System revenues	\$810	\$964	\$996	\$1,004	\$1,492	\$1,935
Users' consumer surplus	\$1,216	\$1,304	\$1,363	\$1,379	\$1,899	\$2,310
Total benefits to HSGT users	\$2,027	\$2,268	\$2,359	\$2,384	\$3,391	\$4,245
Benefits to the public at large:						
Airport congestion delay savings						
Operation delays	\$44	\$48	\$49	\$50	\$66	\$73
Passenger delays	\$67	\$73	\$75	\$75	\$100	\$111
Total airport congestion delay savings	\$112	\$120	\$124	\$125	\$166	\$184
Highway delay savings	\$510	\$489	\$508	\$513	\$531	\$520
Emission savings	\$26	\$47	\$47	\$68	\$80	\$79
Total benefits to the public at large	\$648	\$657	\$679	\$706	\$777	\$783
Total benefits	\$2,675	\$2,925	\$3,038	\$3,090	\$4,168	\$5,028
Total costs:						
Initial investment	\$598	\$859	\$1,233	\$2,076	\$7,819	\$13,980
O&M expense	\$590	\$589	\$595	\$620	\$893	\$985
Continuing investments	\$40	\$42	\$42	\$61	\$78	\$92
Total costs	\$1,227	\$1,490	\$1,869	\$2,757	\$8,790	\$15,057
Incidence of total costs:						
Costs borne by users	\$810	\$964	\$996	\$1,004	\$1,492	\$1,935
Publicly-borne costs	\$417	\$526	\$873	\$1,752	\$7,298	\$13,121

Pacific Northwest	90	110	125F	125E	New HSR	Maglev
Total benefits less total costs	\$1,447	\$1,434	\$1,168	\$333	(\$4,622)	(\$10,028)
Benefits to HSGT users less costs borne by users	\$1,216	\$1,304	\$1,363	\$1,379	\$1,899	\$2,310
Benefits to the public at large less publicly-borne costs	\$231	\$130	(\$194)	(\$1,046)	(\$6,521)	(\$12,338)
Ratio of total benefits to total costs	2.18	1.96	1.63	1.12	0.47	0.33
Ratio of benefits to HSGT users, to costs borne by users	2.50	2.35	2.37	2.37	2.27	2.19
Ratio of benefits to the public at large, to publicly-borne costs	1.55	1.25	0.78	0.40	0.11	0.06
Does this case meet the threshold tests for "partnership potential"?	YES	YES	YES	YES	NO	NO

System Requirements and Performance (Dollars are in millions except as noted.)								
Texas Triangle	90	110	125F	125E	150F	150E	New HSR	Maglev
<i>Physical, production, and traffic factors (traffic data is for the year 2020)</i>								
Route-miles	792	783	783	783	783	783	436	436
Trip-time, hours, Dallas-San Antonio	4.4	3.7	3.5	3.4	3.1	3.1	2.6	1.7
Average train speed (mph)	74	88	94	95	103	104	123	179
Average fare per passenger-mile (dollars)	0.177	0.178	0.177	0.177	0.188	0.188	0.217	0.284
Trains per day in each direction	10	15	16	17	18	18	22	47
Passengers, Millions of Trips (2020)	3.2	4.7	5.2	5.3	5.6	5.6	7.5	8.1
Passenger-Miles, Millions (2020)	653	982	1,111	1,124	1,208	1,215	1,650	1,840
Average trip length (miles)	205	210	212	213	215	215	220	226
Average trip length as % of route length	26%	27%	27%	27%	27%	27%	50%	52%
HSGT traffic density per route-mile (millions of passenger-miles per route-mile)	0.8	1.3	1.4	1.4	1.5	1.6	3.8	4.2
Percent of air traffic diverted	7.4%	13.3%	15.6%	15.9%	17.7%	17.9%	25.9%	31.4%
Percent of intercity auto traffic diverted	3.3%	4.4%	4.8%	4.8%	5.0%	5.0%	5.5%	5.1%
Percent of HSGT traffic by source:								
Diverted from air	35%	42%	44%	44%	47%	47%	57%	64%
Diverted from auto	44%	40%	39%	39%	37%	37%	29%	25%
Diverted from conventional rail	2%	2%	1%	1%	1%	1%	1%	1%
Diverted from bus	9%	7%	7%	7%	6%	6%	4%	3%
Induced	9%	9%	9%	9%	9%	9%	8%	8%
<i>Operating efficiency factors, 2020</i>								
Train-miles. millions	5.0	7.3	8.0	8.2	8.9	8.9	11.5	24.6
Passenger-miles per train mile	131	134	139	137	136	137	144	75
Seat-miles, millions	1,312	1,937	2,110	2,171	2,344	2,343	3,252	3,686
Load factor	50%	51%	53%	52%	52%	52%	51%	50%
Gross ton-miles, millions	1,799	2,539	2,605	2,599	2,805	2,716	4,489	2,212
Passenger-miles per gross ton-mile	0.36	0.39	0.43	0.43	0.43	0.45	0.37	0.83
Train-hours, millions	0.07	0.08	0.08	0.09	0.09	0.09	0.09	0.14
Passenger-miles per train hour	9,732	11,751	13,073	12,975	14,078	14,224	17,774	13,438
Operating ratio	67%	60%	56%	62%	51%	59%	49%	38%
<i>Operating results for 2020</i>								
Revenues:								
Passenger transportation revenue	\$115	\$175	\$197	\$199	\$228	\$229	\$359	\$523
Income from ancillary activities	\$4	\$5	\$6	\$6	\$6	\$6	\$9	\$9
System revenues	\$119	\$180	\$203	\$205	\$234	\$235	\$367	\$533
<i>Percent of system revenues from ancillary activities</i>	3%	3%	3%	3%	3%	3%	2%	2%
Operating and maintenance expenses:								
Maintenance of way	\$8	\$9	\$7	\$16	\$6	\$17	\$24	\$23
Maintenance of equipment	\$10	\$14	\$15	\$13	\$16	\$15	\$26	\$17
Transportation	\$18	\$25	\$26	\$31	\$27	\$34	\$38	\$63
Passenger traffic and services	\$21	\$29	\$31	\$32	\$33	\$34	\$45	\$54
General and administrative	\$21	\$29	\$31	\$31	\$33	\$35	\$44	\$43
Total O&M expense	\$78	\$105	\$110	\$123	\$117	\$134	\$176	\$199
<i>Per passenger-mile (dollars):</i>								
Maintenance of way	\$0.012	\$0.009	\$0.006	\$0.015	\$0.005	\$0.014	\$0.014	\$0.012
Maintenance of equipment	\$0.015	\$0.014	\$0.013	\$0.012	\$0.013	\$0.012	\$0.016	\$0.009
Transportation	\$0.027	\$0.025	\$0.023	\$0.027	\$0.023	\$0.028	\$0.023	\$0.034
Passenger traffic and services	\$0.033	\$0.029	\$0.028	\$0.028	\$0.028	\$0.028	\$0.027	\$0.029
General and administrative	\$0.032	\$0.029	\$0.028	\$0.028	\$0.028	\$0.029	\$0.027	\$0.024
Total O&M expense	\$0.119	\$0.107	\$0.099	\$0.110	\$0.096	\$0.110	\$0.107	\$0.108
Operating surplus	\$41	\$75	\$93	\$82	\$117	\$101	\$192	\$333
<i>Operating surplus per passenger-mile (dollars)</i>	\$0.063	\$0.076	\$0.084	\$0.073	\$0.097	\$0.083	\$0.116	\$0.181
Year showing first operating surplus	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000	Year 2000

Texas Triangle	90	110	125F	125E	150F	150E	New HSR	Maglev
Life-Cycle Measures (All amounts are present values, as of the year 2000, of cash inflows/outflows between 2000 and 2040.)								
Revenues:								
Passenger Transportation Revenues	\$868	\$1,358	\$1,540	\$1,558	\$1,788	\$1,798	\$2,840	\$4,235
Income from Ancillary Activities	\$27	\$41	\$46	\$46	\$49	\$49	\$69	\$76
System Revenues	\$894	\$1,399	\$1,586	\$1,604	\$1,837	\$1,847	\$2,909	\$4,311
Less: Total O&M expenses	\$646	\$871	\$918	\$1,046	\$971	\$1,134	\$1,510	\$1,735
Operating surplus	\$248	\$528	\$668	\$558	\$866	\$713	\$1,399	\$2,575
Less: Continuing investments	\$53	\$72	\$83	\$73	\$69	\$67	\$232	\$122
Surplus after continuing investments	\$195	\$456	\$586	\$486	\$797	\$646	\$1,168	\$2,453
Initial investment:								
Initial vehicle investment	\$270	\$353	\$353	\$353	\$353	\$353	\$652	\$626
Initial infrastructure investment	\$590	\$1,355	\$3,408	\$4,254	\$3,990	\$5,421	\$4,408	\$9,490
Initial investment for ancillary activities	\$4	\$5	\$6	\$6	\$6	\$6	\$11	\$11
Initial investment, Total	\$863	\$1,714	\$3,767	\$4,613	\$4,349	\$5,780	\$5,071	\$10,127
Percent of total initial investment pertaining to--								
Vehicles	31%	21%	9%	8%	8%	6%	13%	6%
Infrastructure	68%	79%	90%	92%	92%	94%	87%	94%
Ancillary activities	0%	0%	0%	0%	0%	0%	0%	0%
Total initial investment per route-mile	\$1.1	\$2.2	\$4.8	\$5.9	\$5.6	\$7.4	\$11.6	\$23.2
Portion of initial investment that is <u>not</u> covered by surplus after continuing investments	\$668	\$1,258	\$3,182	\$4,128	\$3,552	\$5,134	\$3,903	\$7,674
Percentage of initial investment covered by surplus after continuing investments	23%	27%	16%	11%	18%	11%	23%	24%
Comparison of Benefits and Costs; Assessment of Partnership Potential								
Surplus after continuing investments	\$195	\$456	\$586	\$486	\$797	\$646	\$1,168	\$2,453
Total benefits:								
Benefits to HSGT users:								
System revenues	\$894	\$1,399	\$1,586	\$1,604	\$1,837	\$1,847	\$2,909	\$4,311
Users' consumer surplus	\$1,050	\$1,814	\$2,116	\$2,146	\$2,395	\$2,412	\$3,654	\$4,543
Total benefits to HSGT users	\$1,944	\$3,213	\$3,702	\$3,750	\$4,232	\$4,259	\$6,563	\$8,853
Benefits to the public at large:								
Airport congestion delay savings								
Operation delays	\$26	\$47	\$54	\$55	\$61	\$62	\$101	\$121
Passenger delays	\$36	\$63	\$74	\$75	\$83	\$84	\$143	\$171
Total airport congestion delay savings	\$63	\$110	\$128	\$130	\$144	\$145	\$244	\$292
Highway delay savings	\$302	\$399	\$430	\$433	\$446	\$447	\$418	\$382
Emission savings	\$3	\$57	\$66	\$101	\$46	\$115	\$157	\$155
Total benefits to the public at large	\$367	\$566	\$624	\$664	\$636	\$707	\$819	\$829
Total benefits	\$2,311	\$3,779	\$4,326	\$4,414	\$4,868	\$4,966	\$7,382	\$9,682
Total costs:								
Initial investment	\$863	\$1,714	\$3,767	\$4,613	\$4,349	\$5,780	\$5,071	\$10,127
O&M expense	\$646	\$871	\$918	\$1,046	\$971	\$1,134	\$1,510	\$1,735
Continuing investments	\$53	\$72	\$83	\$73	\$69	\$67	\$232	\$122
Total costs	\$1,562	\$2,657	\$4,768	\$5,732	\$5,389	\$6,981	\$6,812	\$11,984
Incidence of total costs:								
Costs borne by users	\$894	\$1,399	\$1,586	\$1,604	\$1,837	\$1,847	\$2,909	\$4,311
Publicly-borne costs	\$668	\$1,258	\$3,182	\$4,128	\$3,552	\$5,134	\$3,903	\$7,674

Texas Triangle	90	110	125F	125E	150F	150E	New HSR	Maglev
Total benefits less total costs	\$749	\$1,122	(\$441)	(\$1,318)	(\$520)	(\$2,015)	\$570	(\$2,302)
Benefits to HSGT users less costs borne by users	\$1,050	\$1,814	\$2,116	\$2,146	\$2,395	\$2,412	\$3,654	\$4,543
Benefits to the public at large less publicly-borne costs	(\$301)	(\$692)	(\$2,557)	(\$3,464)	(\$2,916)	(\$4,427)	(\$3,084)	(\$6,845)
Ratio of total benefits to total costs	1.48	1.42	0.91	0.77	0.90	0.71	1.08	0.81
Ratio of benefits to HSGT users, to costs borne by users	2.17	2.30	2.33	2.34	2.30	2.31	2.26	2.05
Ratio of benefits to the public at large, to publicly-borne costs	0.55	0.45	0.20	0.16	0.18	0.14	0.21	0.11
Does this case meet the threshold tests for "partnership potential"?	YES	YES	NO	NO	NO	NO	YES	NO

System Requirements and Performance (Dollars are in millions except as noted.)							
Empire Corridor Results ("N/Av" means "Not Available." "N/Ap" means "Not Applicable.")	Accelerail 125F: Extension	New HSR: Empire/Northeast System	New HSR: NEC Alone	New HSR: Empire Corridor Proper	Maglev: Empire/Northeast System	Maglev: NEC Alone	Maglev: Empire Corridor Proper
Physical, production, and traffic factors (traffic data is for the year 2020)							
Route-miles	467	880	441	438	878	441	437
Trip-time, hours, New York-Buffalo	5.2	3.3	N/Ap	3.3	2.4	N/Ap	2.4
Average train speed (mph)	86	114	110	120	166	163	170
Average fare per passenger-mile (dollars)	0.192	0.309	0.332	0.255	0.350	0.379	0.289
Trains per day in each direction, New York-Buffalo	50	50	N/Ap	50	47	N/Ap	47
Passengers, Millions of Trips (2020)	9.4	32.6	24.8	7.8	33.9	25.8	8.2
Passenger-Miles, Millions (2020)	2,229	6,885	4,773	2,112	7,448	5,094	2,355
Average trip length (miles)	237	211	193	271	219	198	287
Average trip length as % of route length	N/Av	24%	44%	N/Av	25%	45%	N/Av
HSGT traffic density per route-mile (millions of passenger-miles per route-mile)	4.8	7.8	10.8	4.8	8.5	11.5	5.4
Percent of air traffic diverted	N/Av	24.5%	27.0%	N/Av	31.8%	35.2%	N/Av
Percent of intercity auto traffic diverted	N/Av	2.6%	0.7%	N/Av	2.6%	0.7%	N/Av
Percent of HSGT traffic by source:							
Diverted from air	N/Av	24%	22%	N/Av	29%	27%	N/Av
Diverted from auto	N/Av	11%	2%	N/Av	11%	2%	N/Av
Diverted from conventional rail	N/Av	58%	70%	N/Av	55%	66%	N/Av
Diverted from bus	N/Av	1%	0%	N/Av	0%	0%	N/Av
Induced	N/Av	6%	5%	N/Av	6%	5%	N/Av
Operating efficiency factors, 2020							
Train-miles, millions	19.6	64.2	39.4	24.8	60.1	36.7	23.4
Passenger-miles per train mile	114	107	121	85	124	139	101
Seat-miles, millions	5,393	18,241	11,203	7,039	19,545	11,932	7,613
Load factor	41%	38%	43%	30%	38%	43%	31%
Gross ton-miles, millions	6,563	25,178	15,463	9,715	10,825	6,609	4,216
Passenger-miles per gross ton-mile	0.34	0.27	0.31	0.22	0.69	0.77	0.56
Train-hours, millions	0.23	0.56	0.36	0.21	0.36	0.23	0.14
Passenger-miles per train hour	9,726	12,187	13,306	10,241	20,536	22,612	17,133
Operating ratio	51%	37%	34%	45%	28%	26%	36%
Operating results for 2020							
Revenues:							
Passenger transportation revenue	\$427	\$2,124	\$1,587	\$537	\$2,610	\$1,931	\$679
Income from ancillary activities	\$2	\$61	\$43	\$18	\$63	\$45	\$18
System revenues	\$429	\$2,185	\$1,630	\$555	\$2,674	\$1,976	\$698
<i>Percent of system revenues from ancillary activities</i>	0.4%	2.8%	2.7%	3.2%	2.4%	2.3%	2.6%
Operating and maintenance expenses:							
Maintenance of way	\$14	\$57	\$43	\$14	\$56	\$33	\$24
Maintenance of equipment	\$32	\$136	\$88	\$47	\$81	\$53	\$29
Transportation	\$64	\$220	\$138	\$82	\$247	\$154	\$93
Passenger traffic and services	\$63	\$212	\$156	\$56	\$218	\$160	\$58
General and administrative	\$47	\$158	\$114	\$44	\$135	\$95	\$40
Total O&M expense	\$220	\$783	\$540	\$244	\$738	\$494	\$244
<i>Per passenger-mile (dollars):</i>							
Maintenance of way	\$0.006	\$0.008	\$0.009	\$0.006	\$0.008	\$0.006	\$0.010
Maintenance of equipment	\$0.014	\$0.020	\$0.018	\$0.022	\$0.011	\$0.010	\$0.012
Transportation	\$0.029	\$0.032	\$0.029	\$0.039	\$0.033	\$0.030	\$0.040
Passenger traffic and services	\$0.028	\$0.031	\$0.033	\$0.027	\$0.029	\$0.031	\$0.025
General and administrative	\$0.021	\$0.023	\$0.024	\$0.021	\$0.018	\$0.019	\$0.017
Total O&M expense	\$0.099	\$0.114	\$0.113	\$0.115	\$0.099	\$0.097	\$0.104
Operating surplus	\$209	\$1,402	\$1,090	\$311	\$1,935	\$1,482	\$453
<i>Operating surplus per passenger-mile (dollars)</i>	\$0.094	\$0.204	\$0.228	\$0.147	\$0.260	\$0.291	\$0.193

Empire Corridor Results ("N/Av" means "Not Available." "N/Av" means "Not Applicable.")	Accelerail 125F: Extension	New HSR: Empire/Northeast System	New HSR: NEC Alone	New HSR: Empire Corridor Proper	Maglev: Empire/Northeast System	Maglev: NEC Alone	Maglev: Empire Corridor Proper
Life-Cycle Measures (All amounts are present values, as of the year 2000, of cash inflows/outflows between 2000 and 2040.)							
Revenues:							
Passenger Transportation Revenues	\$3,576	\$17,633	\$13,089	\$4,544	\$21,618	\$15,917	\$5,700
Income from Ancillary Activities	\$15	\$497	\$353	\$144	\$515	\$367	\$148
System Revenues	\$3,591	\$18,129	\$13,442	\$4,687	\$22,133	\$16,285	\$5,848
Less: Total O&M expenses	\$1,930	\$6,832	\$4,687	\$2,145	\$6,523	\$4,328	\$2,194
Operating surplus	\$1,661	\$11,297	\$8,755	\$2,542	\$15,610	\$11,956	\$3,654
Less: Continuing investments	\$188	\$767	\$478	\$289	\$552	\$349	\$203
Surplus after continuing investments	\$1,473	\$10,530	\$8,277	\$2,253	\$15,059	\$11,607	\$3,451
Initial investment:							
Initial vehicle investment	\$404	\$2,739	\$1,826	\$913	\$2,311	\$1,541	\$770
Initial infrastructure investment	\$1,487	\$26,908	\$17,232	\$9,676	\$30,961	\$20,524	\$10,437
Initial investment for ancillary activities	\$40	\$93	\$70	\$23	\$96	\$73	\$24
Initial investment, Total	\$1,932	\$29,739	\$19,127	\$10,612	\$33,369	\$22,137	\$11,232
Percent of total initial investment pertaining to--							
Vehicles	21%	9%	10%	9%	7%	7%	7%
Infrastructure	77%	90%	90%	91%	93%	93%	93%
Ancillary activities	2%	0%	0%	0%	0%	0%	0%
Total initial investment per route-mile	\$4.1	\$33.8	\$43.4	\$24.2	\$38.0	\$50.2	\$25.7
Portion of initial investment that is <u>not</u> covered by surplus after continuing investments	\$459	\$19,210	\$10,851	\$8,359	\$18,310	\$10,530	\$7,780
Percentage of initial investment covered by surplus after continuing investments	76%	35%	43%	21%	45%	52%	31%
Comparison of Benefits and Costs; Assessment of Partnership Potential							
Surplus after continuing investments	\$1,473	\$10,530	\$8,277	\$2,253	\$15,059	\$11,607	\$3,451
Total benefits:							
Benefits to HSGT users:							
System revenues	\$3,591	\$18,129	\$13,442	\$4,687	\$22,133	\$16,285	\$5,848
Users' consumer surplus	\$4,374	\$12,479	\$7,550	\$4,929	\$14,352	\$8,642	\$5,710
Total benefits to HSGT users	\$7,965	\$30,609	\$20,993	\$9,616	\$36,485	\$24,927	\$11,558
Benefits to the public at large:							
Airport congestion delay savings							
Operation delays	\$343	\$1,299	\$1,011	\$288	\$1,496	\$1,209	\$287
Passenger delays	\$609	\$2,241	\$1,717	\$524	\$2,580	\$2,055	\$525
Total airport congestion delay savings	\$951	\$3,541	\$2,728	\$812	\$4,076	\$3,264	\$812
Highway delay savings	\$652	\$1,201	\$521	\$680	\$1,416	\$719	\$697
Emission savings	\$113	\$293	\$143	\$150	\$243	\$101	\$141
Total benefits to the public at large	\$1,716	\$5,034	\$3,392	\$1,643	\$5,735	\$4,084	\$1,651
Total benefits	\$9,681	\$35,643	\$24,384	\$11,259	\$42,219	\$29,011	\$13,209
Total costs:							
Initial investment	\$1,932	\$29,739	\$19,127	\$10,612	\$33,369	\$22,137	\$11,232
O&M expense	\$1,930	\$6,832	\$4,687	\$2,145	\$6,523	\$4,328	\$2,194
Continuing investments	\$188	\$767	\$478	\$289	\$552	\$349	\$203
Total costs	\$4,050	\$37,339	\$24,293	\$13,046	\$40,443	\$26,815	\$13,629
Incidence of total costs:							
Costs borne by users	\$3,591	\$18,129	\$13,442	\$4,687	\$22,133	\$16,285	\$5,848
Publicly-borne costs	\$459	\$19,210	\$10,851	\$8,359	\$18,310	\$10,530	\$7,780
Total benefits less total costs	\$5,631	(\$1,696)	\$91	(\$1,787)	\$1,776	\$2,196	(\$420)
Benefits to HSGT users less costs borne by users	\$4,374	\$12,479	\$7,550	\$4,929	\$14,352	\$8,642	\$5,710
Benefits to the public at large less publicly-borne costs	\$1,257	(\$14,175)	(\$7,459)	(\$6,716)	(\$12,576)	(\$6,446)	(\$6,130)
Ratio of total benefits to total costs	2.39	0.95	1.00	0.86	1.04	1.08	0.97

Empire Corridor Results ("N/A" means "Not Available." "N/Ap" means "Not Applicable.")	Accelerail 125F: Extension	New HSR: Empire/Northeast System	New HSR: NEC Alone	New HSR: Empire Corridor Proper	Maglev: Empire/Northeast System	Maglev: NEC Alone	Maglev: Empire Corridor Proper
Ratio of benefits to HSGT users, to costs borne by users	2.22	1.69	1.56	2.05	1.65	1.53	1.98
Ratio of benefits to the public at large, to publicly-borne costs	3.74	0.26	0.31	0.20	0.31	0.39	0.21
Does this case meet the threshold tests for "partnership potential"?	YES	YES	YES	NO	YES	YES	YES

System Requirements and Performance (Dollars are in millions except as noted.)							
Southeast Corridor Results ("N/Av" means "Not Available." "N/Ap" means "Not Applicable.")	Accelerail 110: Extension	New HSR: Southeast/Northeast System	New HSR: NEC Alone	New HSR: Southeast Corridor Proper	Maglev: Southeast/Northeast System	Maglev: NEC Alone	Maglev: Southeast Corridor Proper
Physical, production, and traffic factors (traffic data is for the year 2020)							
Route-miles	477	862	441	421	861	441	420
Trip-time, hours, Charlotte-Washington	5.7	3.0	N/Ap	3.0	2.1	N/Ap	2.1
Average train speed (mph)	79	117	110	137	171	163	183
Average fare per passenger-mile (dollars)	0.176	0.303	0.332	0.248	0.327	0.379	0.261
Trains per day in each direction, Charlotte-Washington	27	53	N/Ap	53	65	N/Ap	65
Passengers, Millions of Trips (2020)	5.7	32.5	24.8	7.7	36.5	25.8	10.8
Passenger-Miles, Millions (2020)	1,689	7,322	4,773	2,549	9,152	5,094	4,058
Average trip length (miles)	295	225	193	331	251	198	377
Average trip length as % of route length	N/Av	26%	44%	N/Av	29%	45%	N/Av
HSGT traffic density per route-mile (millions of passenger-miles per route-mile)	3.5	8.5	10.8	6.1	10.6	11.5	9.7
Percent of air traffic diverted	N/Av	25.1%	27.0%	N/Av	38.8%	35.2%	N/Av
Percent of intercity auto traffic diverted	N/Av	2.5%	0.7%	N/Av	3.2%	0.7%	N/Av
Percent of HSGT traffic by source:							
Diverted from air	N/Av	29%	22%	N/Av	36%	27%	N/Av
Diverted from auto	N/Av	9%	2%	N/Av	9%	2%	N/Av
Diverted from conventional rail	N/Av	56%	70%	N/Av	48%	66%	N/Av
Diverted from bus	N/Av	0%	0%	N/Av	0%	0%	N/Av
Induced	N/Av	6%	5%	N/Av	6%	5%	N/Av
Operating efficiency factors, 2020							
Train-miles, millions	13.3	57.5	39.4	18.1	63.5	36.7	26.8
Passenger-miles per train mile	127	127	121	141	144	139	151
Seat-miles, millions	4,565	16,333	11,203	5,130	20,644	11,932	8,712
Load factor	37%	45%	43%	50%	44%	43%	47%
Gross ton-miles, millions	5,238	22,544	15,463	7,081	11,434	6,609	4,825
Passenger-miles per gross ton-mile	0.32	0.32	0.31	0.36	0.80	0.77	0.84
Train-hours, millions	0.17	0.49	0.36	0.13	0.37	0.23	0.15
Passenger-miles per train hour	10,056	14,922	13,306	19,314	24,632	22,612	27,743
Operating ratio	53%	34%	34%	33%	26%	26%	27%
Operating results for 2020							
Revenues:							
Passenger transportation revenue	\$297	\$2,219	\$1,587	\$633	\$2,989	\$1,931	\$1,058
Income from ancillary activities	\$13	\$59	\$43	\$15	\$65	\$45	\$20
System revenues	\$311	\$2,278	\$1,630	\$648	\$3,054	\$1,976	\$1,078
<i>Percent of system revenues from ancillary activities</i>	4.3%	2.6%	2.7%	2.4%	2.1%	2.3%	1.8%
Operating and maintenance expenses:							
Maintenance of way	\$10	\$67	\$43	\$24	\$51	\$33	\$18
Maintenance of equipment	\$25	\$119	\$88	\$31	\$82	\$53	\$29
Transportation	\$45	\$193	\$138	\$54	\$256	\$154	\$102
Passenger traffic and services	\$43	\$213	\$156	\$57	\$242	\$160	\$82
General and administrative	\$34	\$160	\$114	\$46	\$150	\$95	\$55
Total O&M expense	\$157	\$751	\$540	\$212	\$780	\$494	\$286
Per passenger-mile (dollars):							
Maintenance of way	\$0.006	\$0.009	\$0.009	\$0.009	\$0.006	\$0.006	\$0.004
Maintenance of equipment	\$0.015	\$0.016	\$0.018	\$0.012	\$0.009	\$0.010	\$0.007
Transportation	\$0.027	\$0.026	\$0.029	\$0.021	\$0.028	\$0.030	\$0.025
Passenger traffic and services	\$0.026	\$0.029	\$0.033	\$0.022	\$0.026	\$0.031	\$0.020
General and administrative	\$0.020	\$0.022	\$0.024	\$0.018	\$0.016	\$0.019	\$0.013
Total O&M expense	\$0.093	\$0.103	\$0.113	\$0.083	\$0.085	\$0.097	\$0.071
Operating surplus	\$154	\$1,527	\$1,090	\$436	\$2,273	\$1,482	\$791
Operating surplus per passenger-mile (dollars)	\$0.091	\$0.209	\$0.228	\$0.171	\$0.248	\$0.291	\$0.195

Southeast Corridor Results ("N/Av" means "Not Available." "N/Av" means "Not Applicable.")	Accelerail 110: Extension	New HSR: Southeast/Northeast System	New HSR: NEC Alone	New HSR: Southeast Corridor Proper	Maglev: Southeast/Northeast System	Maglev: NEC Alone	Maglev: Southeast Corridor Proper
Life-Cycle Measures (All amounts are present values, as of the year 2000, of cash inflows/outflows between 2000 and 2040.)							
Revenues:							
Passenger Transportation Revenues	\$2,451	\$18,306	\$13,089	\$5,217	\$24,678	\$15,917	\$8,760
Income from Ancillary Activities	\$110	\$476	\$353	\$123	\$528	\$367	\$161
System Revenues	\$2,561	\$18,782	\$13,442	\$5,340	\$25,205	\$16,285	\$8,921
Less: Total O&M expenses	\$1,389	\$6,531	\$4,687	\$1,844	\$6,856	\$4,328	\$2,528
Operating surplus	\$1,172	\$12,251	\$8,755	\$3,496	\$18,349	\$11,956	\$6,393
Less: Continuing investments	\$131	\$675	\$478	\$196	\$531	\$349	\$182
Surplus after continuing investments	\$1,041	\$11,576	\$8,277	\$3,299	\$17,818	\$11,607	\$6,211
Initial investment:							
Initial vehicle investment	\$232	\$2,373	\$1,826	\$548	\$2,311	\$1,541	\$770
Initial infrastructure investment	\$803	\$23,529	\$17,232	\$6,297	\$30,037	\$20,524	\$9,513
Initial investment for ancillary activities	\$13	\$88	\$70	\$19	\$100	\$73	\$27
Initial investment, Total	\$1,047	\$25,991	\$19,127	\$6,864	\$32,448	\$22,137	\$10,311
Percent of total initial investment pertaining to--							
Vehicles	22%	9%	10%	8%	7%	7%	7%
Infrastructure	77%	91%	90%	92%	93%	93%	92%
Ancillary activities	1%	0%	0%	0%	0%	0%	0%
Total initial investment per route-mile	\$2.2	\$30.1	\$43.4	\$16.3	\$37.7	\$50.2	\$24.6
Portion of initial investment that is <u>not</u> covered by surplus after continuing investments	\$7	\$14,415	\$10,851	\$3,565	\$14,630	\$10,530	\$4,100
Percentage of initial investment covered by surplus after continuing investments	99%	45%	43%	48%	55%	52%	60%
Comparison of Benefits and Costs; Assessment of Partnership Potential							
Surplus after continuing investments	\$1,041	\$11,576	\$8,277	\$3,299	\$17,818	\$11,607	\$6,211
Total benefits:							
Benefits to HSGT users:							
System revenues	\$2,561	\$18,782	\$13,442	\$5,340	\$25,205	\$16,285	\$8,921
Users' consumer surplus	\$2,550	\$13,045	\$7,550	\$5,494	\$17,236	\$8,642	\$8,593
Total benefits to HSGT users	\$5,110	\$31,826	\$20,993	\$10,834	\$42,441	\$24,927	\$17,514
Benefits to the public at large:							
Airport congestion delay savings							
Operation delays	\$238	\$1,255	\$1,011	\$244	\$1,633	\$1,209	\$424
Passenger delays	\$428	\$2,166	\$1,717	\$448	\$2,816	\$2,055	\$761
Total airport congestion delay savings	\$666	\$3,421	\$2,728	\$693	\$4,449	\$3,264	\$1,185
Highway delay savings	\$721	\$2,079	\$521	\$1,559	\$2,734	\$719	\$2,015
Emission savings	\$22	\$339	\$143	\$196	\$297	\$101	\$196
Total benefits to the public at large	\$1,409	\$5,839	\$3,392	\$2,447	\$7,479	\$4,084	\$3,395
Total benefits	\$6,519	\$37,665	\$24,384	\$13,281	\$49,920	\$29,011	\$20,909
Total costs:							
Initial investment	\$1,047	\$25,991	\$19,127	\$6,864	\$32,448	\$22,137	\$10,311
O&M expense	\$1,389	\$6,531	\$4,687	\$1,844	\$6,856	\$4,328	\$2,528
Continuing investments	\$131	\$675	\$478	\$196	\$531	\$349	\$182
Total costs	\$2,567	\$33,197	\$24,293	\$8,904	\$39,836	\$26,815	\$13,021
Incidence of total costs:							
Costs borne by users	\$2,561	\$18,782	\$13,442	\$5,340	\$25,205	\$16,285	\$8,921
Publicly-borne costs	\$7	\$14,415	\$10,851	\$3,565	\$14,630	\$10,530	\$4,100
Total benefits less total costs	\$3,952	\$4,468	\$91	\$4,377	\$10,085	\$2,196	\$7,889
Benefits to HSGT users less costs borne by users	\$2,550	\$13,045	\$7,550	\$5,494	\$17,236	\$8,642	\$8,593
Benefits to the public at large less publicly-borne costs	\$1,403	(\$8,576)	(\$7,459)	(\$1,117)	(\$7,151)	(\$6,446)	(\$705)
Ratio of total benefits to total costs	2.54	1.13	1.00	1.49	1.25	1.08	1.61

Southeast Corridor Results ("N/Av" means "Not Available." "N/Ap" means "Not Applicable.")	Accelerail 110: Extension	New HSR: Southeast/ Northeast System	New HSR: NEC Alone	New HSR: Southeast Corridor Proper	Maglev: Southeast/ Northeast System	Maglev: NEC Alone	Maglev: Southeast Corridor Proper
Ratio of benefits to HSGT users, to costs borne by users	2.00	1.69	1.56	2.03	1.68	1.53	1.96
Ratio of benefits to the public at large, to publicly-borne costs	207.44	0.41	0.31	0.69	0.51	0.39	0.83
Does this case meet the threshold tests for "partnership potential"?	YES	YES	YES	YES	YES	YES	YES